THE AMERICAN ELEVATOR AND GRAIN TRADE.

A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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F. D. BABCOCK.

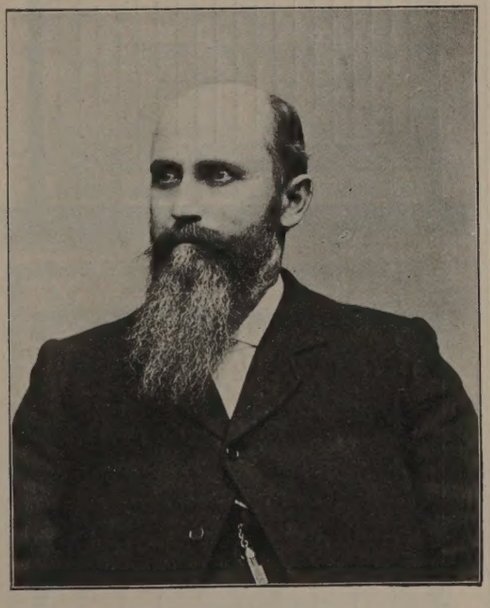
One of the most successful grain dealers' associations of the country is the Grain Shippers' Association of Northwest Iowa. It has a large number of members, and is growing rapidly. Its success in suing rail carriers for the amount of overcharges on grain has gained it a national reputation. Much credit is due for its organization and success to its efficient secretary, F. D. Babcock of Ida Grove, Iowa, whose portrait is given herewith.

Mr. Babcock was born at Livonia, N. Y., March 26, 1845. In 1846 his parents, with their ten children, moved to McHenry County, Illinois, and engaged in farming. When the war broke out four brothers enlisted in the federal army, and F. D. Babcock, being the youngest of the children, was left to look after the farm. His father was so broken in health that he could give it little attention. The responsibilities placed upon him during this period were a good schooling for him and developed an independent and persevering spirit which has been of much assistance to him in his association work. After attending a town high school several winters he taught a district school in winter and ran the farm the balance of the year.

He was married Nov. 1, 1865, to Miss Persis D. Sears. Shortly after he was married he attended Eastman's Business College for a short time, then in company with L. M. Gray of Odebolt, who is one of his partners in the grain business, he moved to Boone County, Iowa. Then he engaged as a clerk in a grocery store, and then as a fruit tree agent. Afterward he returned to the grocery business, but soon left it for a position with a coal mining company where he rose from clerk to bookkeeper, and then to general manager of the mines and of the company's store. The failure of the company ended his connection with the mining business. After farming some he went into the lumber business on the Des Moines River, and at the same time was employed in the office of the treasurer of Boone County.

In July, 1883, he commenced to travel for S. H. McCrea & Co. of Chicago. He remained with them and their successors for seven years. About a year before he quit traveling he went into the grain business at Odebolt, the style of the firm being Gray, Babcock & Sears. As they extended their business he moved his family to Ida Grove and made that place his headquarters. At home, as with the grain shippers, he is very popular, and there he is respected by all and considered one of Ida Grove's best citizens.

In the winter of 1889-90 the Grain Shippers' Association of Northwest Iowa was organized and he was elected secretary, a position he still holds. Having regularly visited many of the grain dealers of Northwest Iowa Mr. Babcock was well acquainted with most of them, and this proved of material assistance to him in his work as secretary. As soon as the Association was organized it brought suits against the railway companies for the recovery of overcharges on grain shipments. The case went to the Supreme Court and the railroad officials made a rush to get a speedy settlement for most of the suits. Some of these suits are still before the Supreme Court, but the railway companies have continued to charge their exorbitant rates, and other suits will soon be brought to recover the overcharges exacted on coarse grain shipped to Chicago and common points.



F. D. BABCOCK.

When the grain dealers organize a strong national and a number of local associations they may expect to secure relief from the abuses now heaped upon them.

The consignee is entitled to a reasonable time to unload, taking into consideration all surrounding facts and circumstances; and liability for demurrage does not exist in the absence of an express contract, unless demurrage is caused by the negligence or fault of the consignee.

THE SPRINKLER EQUIPMENT OF ELEVATOR A2 AT MINNEAPOLIS.

The burning of elevator A2 at Minneapolis recently has led to some investigation and a good deal of speculation as to the defects in its construction and its sprinkler equipment from an insurer's standpoint. Mr. T. C. Robinson, the sprinkler inspector for the Chicago Underwriters, after going to Minneapolis and investigating the fire made a report in which he says:

"The engineer states that the cistern supplying the fire pump was exhausted in about 20 minutes after the fire started, and, as the city connection, under the reduced pressure, was unable to supply the pump, it had to be shut down. It seems hardly probable that the cistern was full of water at the time of the fire, as the pump, even if crowded to a greatly increased capacity, would be unable to empty a 50,000-gallon cistern in the time stated. While the smallness of the water supply available for the pump during this fire undoubtedly indicated a weakness, still, I do not consider that this had any bearing on the result, as the fire was clearly beyoud the control of the sprinklers from the start. The failure of the sprinklers in this fire may be attributed to the following conditions: 1. The rapid spread of the fire, due to the open air shaft, the draft and the highly inflammable condition of the dusty woodwork. 2. The slowness with which a dry pipe system of this size, with an air pressure of 40 pounds or over, must necessarily act. 3. The inability of the sprinklers to properly spray all sides of the shaft with a sufficient volume of water to extinguish a fire having any great headway. This is due to the fact that the sprinklers were placed about 7 feet from one wall and under the stair landing, which is on one side of the shaft, thus allowing a fire in the open space occupied by the main belt to burn up beyond the sprinklers."

The inspector states that the fire calls attention to the necessity of providing "cut-offs" or hatches in all open stairways, belt shafts or open communications between the first and bin floors of a grain elevator. The sprinkler equipment in such risks should also be divided across the elevator, instead of lengthwise, as was the case in the burned plant, as the chances for operating the two systems at one time are materially lessened by this arrangement.

W. J. Pearne, Jr., wheat buyer at Briggs, Cal., some time ago ran over and killed a woman while driving on the highway, and has been convicted of manslaughter and sentenced to a year's imprisonment.

UNIFORM FREIGHT CLASSIFICATION.

One of the most important practical recommendations embodied in the report of the United States Interstate Commerce Commission related to the unification of the classification of freights by the railroad systems of the country. The practical importance of this matter is one which cannot be overestimated, and which is readily understood by commercial interests. It is a subject of vital interest in connection with the establishment of through rates of transportation between all points within the United States, and constitutes in its existing shape a serious obstacle to the effective working of the law in its present form.

The advantages which will accrue to the railroads of all sections from the adoption of a uniform classification, to quote a recent interview: Concentration of various articles of freight in harmoniously adjusted classes, and their transportation at rates that can be more easily adjusted than where differing classifications are used; a decrease to a low minimum of the number of articles on which special rates are made, and an ability to obtain better rates and revenue generally on traffic without injury to the commercial interests, with greater ease in quoting through rates within widely extended areas, together with the greater assurance of protection of tariff rates as named in the bills of lading, and greater freedom from overcharge.

REASONABLE RATES ON WHEAT.

In a decision lately rendered by the Interstate Commerce Commission, in a case involving the reasonableness of rates for the transportation of wheat from Walla Walla and Dayton, in Washington, to Portland, Ore., the commission took occasion to restate some conclusions reached by it in earlier cases involving similar circumstances.

The complaint in the case (Evans vs. Union Pacific Railway Company, the Oregon Railway and Navigation Company, and others), filed June 15, 1894, alleged that the defendants charged and demanded an unjust and unreasonable rate of $4.70 per ton for the transportation of wheat in carloads shipped over their railroad from Walla Walla, in the state of Washington, to Portland, in the state of Oregon, a distance of 246 miles, and that a just and reasonable charge for such service should not exceed 1 cent per ton per mile, or $2.46 per ton, the shipper loading and the consignee unloading the freight. After the filing of the complaint the receiver of the Oregon Railway and Navigation Company reduced the wheat rate from Walla Walla of 23½ cents a hundred, or $4.70 a ton, to 21¼ cents a hundred, or $4.25 a ton, and the rate from Dayton of 23¾ cents a hundred, or $4.75 a ton, to 21¼ cents a hundred, or $4.25 a ton.

It was shown among the circumstances having a bearing on the case that the market price of wheat at Portland and other Pacific Coast points had been reduced fully or nearly one-half since 1887, while the wheat rate from Walla Walla to Portland remained the same as that which was put in force in the latter part of that year until shortly after these cases were instituted, when a reduction of 2¼ cents per hundred pounds was conceded by the receiver, and a reduction of 2½ cents was accorded to Dayton. There had been extensive reductions on the other classes of freights from all points on the lines since 1887, and the reductions in wheat rates from points much more remote than Walla Walla or Dayton from Portland had been very considerable. The cost of raising wheat, sacking, warehousing and loading in cars ready for transportation, added to the transportation charge to Portland, it was shown, left far less margin to the producer between such cost and the selling price than in 1887. It was further shown that the road from Walla Walla to Portland has easy grades, and is much less expensive to operate than other portions of the defendant system, but that this part of the road is subject, however, to sand drifts, earth slides and washouts by floods in the Columbia River, and that alkali in the soil increases the natural deterioration of ties and wooden substructures, which, the commission held, were matters to be considered in determining the reasonableness of the rates in question.

Upon a review of all the facts in the case, the commission arrived at the conclusion that the wheat rates in force from Walla Walla and Dayton to Portland when the cases were brought were unjust and unreasonable, but that rates based on 1 cent per ton per mile, namely $2.46 per ton from Walla Walla, and $2.83 per ton from Dayton, as contended for by complainants, would be unjust to the road under present conditions. On the other hand, upon all the facts and considerations before them, the commission held that the reduced rate of 21¼ cents per hundred, or $4.25 a ton, put into effect from both points in August, 1894, was still somewhat too high for the service rendered, and it ruled that the rate from Walla Walla to Portland on wheat in carloads should not exceed 19½ cents per hundred pounds, or $3.90 per ton, while the rate for the somewhat longer distance from Dayton to Portland on wheat in carloads should not exceed 20 cents per hundred pounds, or $4 per ton.

When we consider the fact that grain is carried from Chicago to Baltimore, almost 1,000 miles, for 17 cents, it is seen that the Oregon Railway Company can accept the rates established by the commission without suffering a great loss.

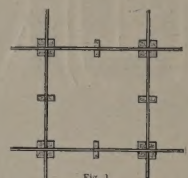


Fig. 1.

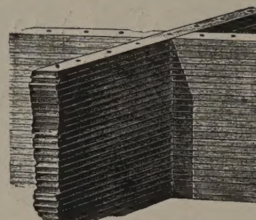


Fig. 2.

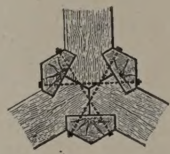


Fig. 3

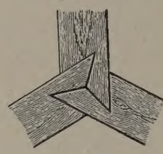


Fig. 4.

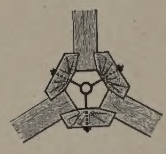


Fig. 5.

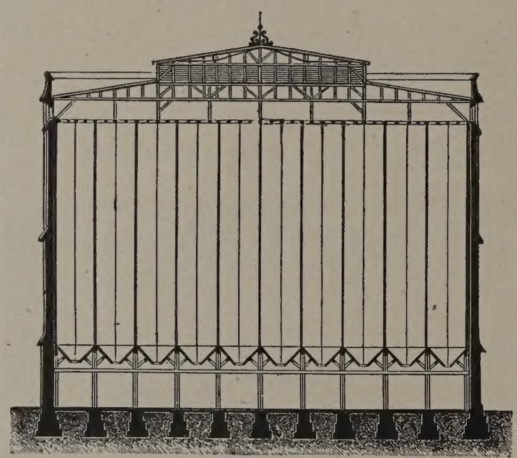


Fig. 6

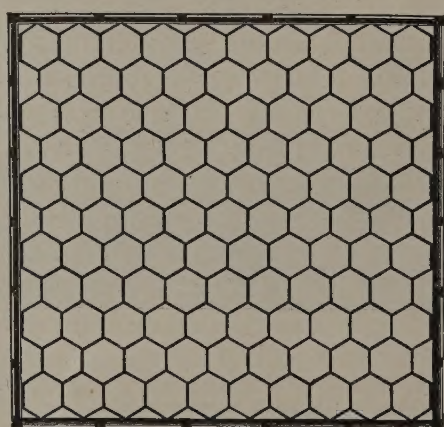


Fig. 7.

THE CONSTRUCTION OF GRANARIES.

THE CONSTRUCTION OF GRANARIES.

No. III.

BY F. STALLMAIER.

The partition walls or partitions are constructed of wood, iron and brickwork. Wood is best to use for linear-shaped shafts, as for instance the square and the hexagon; in both cases it answers well. In order to erect square-shaped shafts, posts are fixed certain distances apart, to which the boards are nailed, and across the shafts anchors are attached to the uprights, to give more stability, and to render the carrying of each shaft independent of the other. Fig. 1 illustrates the said method. By omitting the post and nailing the boards on the top of the other a more substantial shaft is constructed, of which Fig. 2 gives a perspective view. The difficulties which arise by connecting boards up to the hexagon shape are set aside by Alexander Schaeffer's patent, of which Figs. 3 to 5 illustrate three different arrangements, which explain themselves. In Fig. 4 it has to be remarked that the third board has to be pushed in from the top between the first two. Which of these three systems has to be adopted depends upon the size and height of the shafts, and on the size of boards to be used. Figs. 6 and 7 illustrate a silo with hexagon-shaped bins.

The advantages of wood partitions are cheapness and lightness (whereby also the foundations will be cheaper); another thing in its favor is that it is a poor conductor of heat and absorbs moisture deposited upon it. A great drawback to the use of wood is its inflammability.

The assertion that timber favors the nestling of worms (weevil) is incorrect as experience has proved that in iron and brickwork silos this insect is also to be found. Iron in the shape of sheets is only advantageously used for cylindrical shafts, whereby stability and safety from fire are obtained; although iron should not be used except where circumstances demand it, as the cylindrical shape means prodigality of space, and, furthermore, iron is a good conductor of heat, and is not in the least hygroscopical; besides, its durability is far less than that of wood or brick work. Every change in the temperature is transmitted to the grain, and should the grain get hot in one shaft the surrounding bins are also soon affected. As the grain always contains a certain amount of moisture, which condenses on the walls, and as it cannot be absorbed by them, it spoils and decays the grain coming in contact with this evaporation. As an instance, it must be mentioned that the grain rusted fast to the walls in Brooklyn. But by using wood for building up the partition walls, such a thing can never occur, as wood is a good non-conductor of heat, and hygroscopic.

Brickwork comes between iron and wood, and is a non-conductor of heat, but is deficient of the hygroscopic nature of the wood. With regard to fire risk, brickwork is the most excellent material, but in respect of utilizing space it is not economical, as the walls have to be of considerable thickness to insure their stability. An example of a silo with brickwork shafts (bins) is given in Figs. 8, 9 and 10.

[TO BE CONTINUED.]

The Ohio law relating to negotiable bonds, notes, bills and checks, payable at a certain day after date, or after sight, has been amended, so that now they shall be "deemed due and payable on the day mentioned for the payment of the same, without days of grace being allowed thereon, except that when such day mentioned be upon the first day of the week or a legal holiday, then the day of payment shall be upon the next succeeding business day."

THE STORAGE ELEVATOR AS A FIRE RISK.

BY FREDERICK C. MOORE IN "ROUGH NOTES."

These enormous warehouses for the storage of grain and for its transfer from steamer to canal-boat or railroad car, and vice versa, represent large values. Their capacity varies from 500,000 to 1,000,000, or even 1,500,000 bushels, and their value between the first two limits, when reasonably full of grain, will approximate from $325,000 to $650,000. The grain represents the principal portion of above values, and is usually owned by different parties.

Terminal grain elevators are practically always built of wood. One which was built of iron so far as possible caught fire, and the grain burning wrecked it as completely as if it had been of ordinary construction, so one of the referees told the writer. In the usual construction, a heavy framework of timber, about twenty feet high, supports the bins, which are forty to fifty feet high, their walls being made of plank laid with the flat sides together to get as little shrinkage as possible. The outer wall is usually frame, slated or iron-clad, and in most cases independent of the bin work. Not infrequently the wall is brick or stone in first story, and occasionally brick to the eaves. The top of the bins will be from sixty to eighty feet from the ground. The peak of the roof is usually fifty to sixty feet higher; and in the large houses there are often one or two floors above the bin floor, as the one on top of the bins is called. On the bin floor, or the next above it, will be found a heavy line shaft, driven by a belt (occasionally by a vertical shaft) from the engine below, and furnishing the power for the pulleys in elevator heads and other machinery. This shaft gives the name "machinery floor" to its locality, and the name "machineryman" to the man in charge. The entire building is familiarly referred to as "the house."

It is now generally recognized that the shafting in the upper part of the house should be supported, independently of the bin walls, on posts resting on the frame below the bins, to avoid disarrangement of alignment from bin shrinkage, and consequent hot boxes. It is not unusual to notice such bin shrinkage of three or four feet vertically, and this is not uniform all over the house. It is also important to have all bearings accessible, and as near dust-proof as possible, to insure good care and less liability to heat. An inspector looks to see that the grease-cups are filled. There should not be any wooden bearings, but they are sometimes found on belt conveyors, which run at a high speed. Boiler, and preferably engine also, should be outside the main house.

Briefly, the principal operations carried on are as follows: The grain is taken into the house, from a vessel, for instance, by the marine leg, an elevator, adjustable vertically, for the purpose of lowering into the hold, occupying a tower adjoining the main house, built out flush with the edge of the dock, and provided with a slot in its face for the movement of the leg. From the marine leg the grain passes through a scale in the marine tower; thence into an elevator which rises to a very high point, from which it may be spouted into any of the bins in reach. If it must be carried to a more distant bin, it is often transferred by endless belts running at a high speed; but it is now thought better to have short elevators, which can take the grain from the receiving elevator and raise it again to a high point, from which it may be distributed to bins farther on, by gravity, through a spout. This plan does away with the high-speed belt conveyors, on the bin floor at least. The grain is usually dusted by discharging it into a closed hopper, from which the dust is drawn off by a fan or escapes naturally with the current of air which entered with the grain. For distributing from cars and transferring from one bin to another, long elevators, called "lofters," are employed. These extend from the ground floor to a point high above the bin floor.

In the management of the house, the very first requisite is cleanliness, and it requires the personal attention of the superintendent—not always given. It is customary to clean up after every cargo in the best kept houses, unless cargoes are very frequent. Under no circumstances is there any excuse for accumulations of dust six inches deep, which were found in the marine leg of a large Buffalo elevator. The dust is inflammable—in fact, the coarser portions are like fine straw. Gas is therefore all the more objectionable for lighting. Even the dying out filament of an electric incandescent lamp, which had been jarred from its socket by the vibrations of the machinery, and broken in the fall, has been known to set the dust on fire. Incandescent electric lighting is best. The lamps need dusting occasionally, and the main fuses can best be arranged by inclosing them in a tight asbestos-paper lined box, but a porcelain or isinglass cover, such as is sometimes furnished, only affords the very lodging place for dust; which should be avoided. Lanterns are often used, and should be strong, with a solid bottom and a wire guard; spring-bottomed lanterns are quite often found.

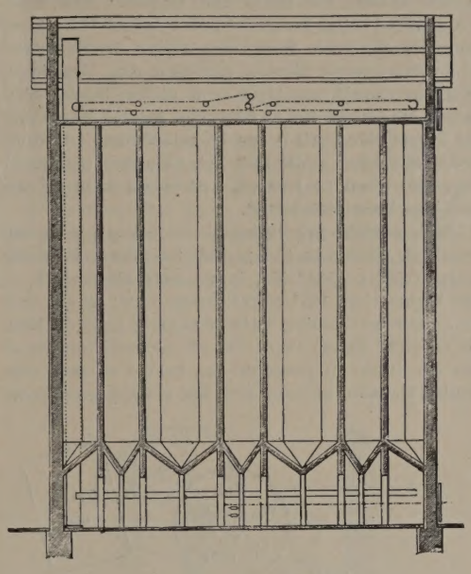


Fig. 8.

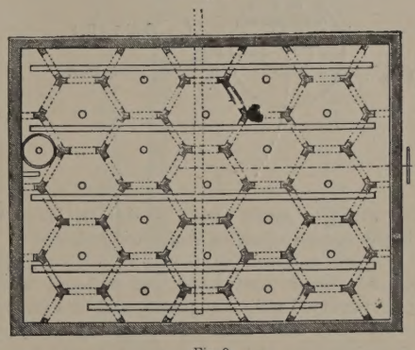


Fig. 9.

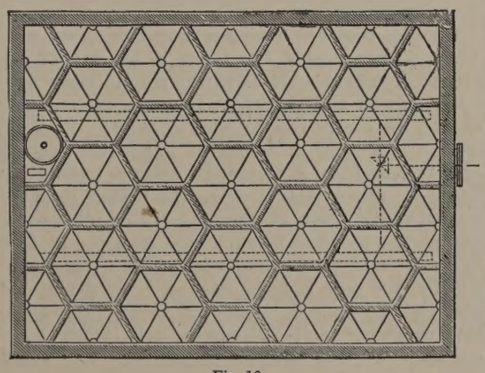


Fig. 10.

THE CONSTRUCTION OF GRANARIES.

Heat is seldom used, except an occasional steam coil; and there seems to be little trouble from this hazard.

There is hardly any class of risks where smoking and the use of matches should be more strictly prohibited. The "scoopers" (shovelers who unload vessels) are a rough, careless lot, and the best managers forbid them to enter the house, often providing a detached shanty where they can eat lunch, and smoke if they choose. It is better to provide some similar place outside the house for the elevator men also, where they must hang their street clothes and where they may smoke.

One of the frequent causes of elevator fires where there is water frontage is sparks, which are thrown into a window, or into the marine tower by way of the slot, from tugs that are moving vessels; and the liability is greater if the water is shallow enough for vessels to ground, for the tug is then more likely to throw out sparks.

One of the simplest methods of protection is a liberal supply of casks and pails, the water therein having been fortified against freezing. Among other places, these should be kept handy to the heads of elevators, for it sometimes happens that the elevator boot becomes so choked with grain as to prevent the bucket-laden belt from moving, but the pulley in the elevator head continues to revolve, and its friction sets the belt and the wooden elevator leg on fire if not discovered and stopped in time. "Turn upside down" extinguishers and small hand force pumps are useful in subduing flame not within reach of a pail.

Hose and sprinkler systems must be kept dry in winter, to avoid freezing; but the writer believes that they should be kept wet when possible, for the advantage of having water on hand at once when needed is more vital than in most other risks, and any objections to it are slight in comparison with the benefit derived. This is done with the hose systems, but the elevator man prefers to keep his sprinkler system dry the year round; and generally does so, in order that there may be time to whistle down the tube, and tell the engineer to shut off the water when a sprinkler goes off by accident, for it entails considerable work if the grain gets wet. The sprinkler systems are large and quite liable to be subject to air leaks, and to local settling which results in making places difficult to drain, so the engineer carries a good big air pressure of 45 to 50 pounds, to prevent the dry valve tripping accidentally, which excess pressure retards the proper speed of the system. Particularly in a dirty house, it is easy to imagine that a fire might spread with sufficient rapidity to open so many heads as to make the system useless. Furthermore, the bins are never sprinkled, though often covered, and the grain burns tenaciously when once started. Add to these disadvantages the presence of numerous hollow spouts, elevator legs, and dust chutes, usually wooden, and difficult or impossible to sprinkle thoroughly, and it will be seen that sprinklers are handicapped in ways peculiar to this class of risks.

The construction and height of an elevator offer difficulties in fighting fire. A man courageous enough to fight a fire in the upper part of an elevator knows that he may turn to go, only to find his exit cut off. What wonder that this knowledge may affect the efficiency of the bravest. One gray-haired old machineryman told the writer that in case of any particular fire up there he would "skip right out;" and no doubt there are many others who share his sentiments, without the courage to express themselves. When once the firemen are driven out of the building, that bane of the underwriters, a total loss, is sure to ensue.

As the time for the opening of the Erie Canal was approaching the railroads running to New York from Buffalo restored the special rate on grain that was cut off at the end of the last season of navigation. This great favor will allow the shipment of grain without a loss.

This is the season of the year when the farmers in Minnesota and the Dakotas commence to ship their wheat here in great quantities. After May 1, according to the laws in the Dakotas, they are obliged to pay a tax on all wheat which they have in store in their wheat bins. To avoid this it is to their interest to dispose of it as soon as possible. Hardly a day passes but what the elevators here receive word from the farmers asking for space.—Superior Telegram.

TREATING SEED GRAIN FOR SMUT.

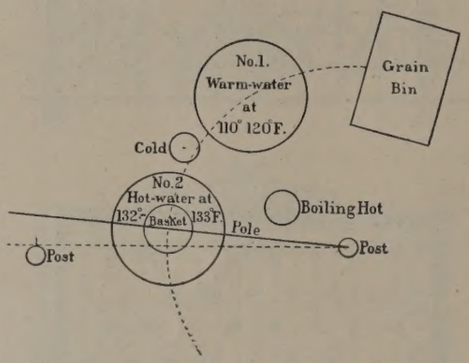
In a pamphlet issued by the United States Department of Agriculture on "The Smuts; Their Cause and Prevention" Walter T. Swingle, assistant in the Division of Vegetable Physiology and Pathology, writes regarding the potassium sulphide treatment for oat smut as follows:

The potassium sulphide should be of the fused form known as "liver of sulphur." It can be obtained of any druggist for from 25 to 50 cents per pound, depending on the quantity purchased. It should be kept in a tight glass vessel, protected from the air, until ready for use. Dissolve 1½ pounds in 25 gallons of water in a wooden vessel; a tight barrel is very good for the purpose. The lumps of potassium sulphide dissolve in a few minutes, making the liquid a clear yellowish-brown color. After thoroughly stirring, put in about 3 bushels of oats and agitate well to insure wetting every grain. The solution must completely cover the grain and be several inches above it, as the grain soaks up some of the liquid. Leave the oats in this solution 24 hours, stirring several times during the day to be sure every kernel is wetted. Then spread out to dry. In treating large quantities of seed, a hogshead or a wooden tank might be used. The solution should not be used more than three times. In no case should any metal be allowed to come in contact with the liquid. This treatment is thoroughly effective for oat smut, and is worthy of trial for stinking smut of wheat.

In subjecting grain to the hot water treatment for stinking smut of wheat and oat smut provide two large vessels, preferably holding at least 20 gallons. Two wash kettles, soap kettles, wash boilers, tubs, or even barrels, will do. One of the vessels should contain warm water, say at 110° to 120° F., and the other scalding water at 132° to 133° F. The first is for the purpose of warming the seed preparatory to dipping it into the second. Unless this precaution is taken it will be difficult to keep the water in the second vessel at the proper temperature. A pail of cold water should be at hand, and it is also necessary to have a kettle filled with boiling water from which to add from time to time to keep the temperature right. Where kettles are used a very small fire should be kept under the kettle of scalding water. The seed which is to be treated must be placed, half a bushel or more at a time, in a closed vessel that will allow free entrance and exit of water on all sides. For this purpose there can be used a bushel basket made of heavy wire, inside of which is spread wire netting, say 12 meshes to the inch; or an iron frame can be made at a trifling cost, over which the wire netting can be stretched. This will allow the water to pass freely and yet prevent the passage of the seed. A sack made of loosely woven material, as gunny sack, can be used instead of the wire basket. A perforated tin vessel is in some respects preferable to any of the above.

In treating stinking smut of wheat, the grain should first be thrown into a vessel filled with cold water; then, after stirring well, skim off the smutted grains that float on top and put the grain into the basket or other vessel for treatment with hot water. This skimming is entirely unnecessary with other grains, and even with wheat when affected only by the loose smut. Now dip the basket of seed in the first vessel, containing water at 110° to 120° F.; after a moment lift it, and when the water has for the most part escaped plunge it into the water again, repeating the operation several times. The object of the lifting and plunging, to which should be added also a rotary motion, is to bring every grain in contact with the hot water. Less than a minute is required for this preparatory treatment, after which plunge the basket of seed into the second vessel, containing water at 132° to 133° F. If the thermometer indicates that the temperature of the water is falling, pour in hot water from the kettle of boiling water until the right degree is attained. If the temperature should rise higher than 133°, add a little cold water. In all cases the water should be well stirred whenever any of a different temperature is added. The basket of seed should very shortly after its immersion be lifted and drained, and then plunged and agitated in the manner described above. This operation should be repeated six or eight times during the immersion, which should be continued ten minutes. In this way every portion of the seed will be subjected to the action of the scalding water. In practice it will be found best to have a man or boy devote his whole time to keeping the temperature at the right point, adding a little hot water if it falls below 132°, and a little cold if it gets above 133° F. A good thermometer should be used, preferably one having the bulb protected against injury from striking the sides of the vessel. Another man should handle the grain and immerse and drain the portion being treated as directed above. After removing the grain from the scalding water, spread on a clean floor or piece of canvas to dry. The layer of grain should not be over 3 inches thick. If it cannot be spread out at once, dip in cold water and set to one side until it can be attended to. It dries better if spread while still hot. Another portion of grain can then be treated, and so on until all the seed has been disinfected.

The important precautions to be taken are as follows: (1) Maintain the proper temperature of the water (132° or 133° F.), in no case allowing it to rise higher than 135° or fall below 130°; (2) see that the volume of scalding water is much greater (at least six or eight times) than that of the seed treated at any one time; (3) never fill the basket or sack containing the seed entirely full, but always leave room



for the grain to move about freely; (4) leave the seed in the second vessel of water ten minutes.

When steam is available, it can be conducted into the second vessel (containing the scalding water) by a pipe provided with a stopcock, and this answers better than any other method for heating the water and for elevating the temperature from time to time. A good arrangement for hot water treatment is shown in figure 99.

A pole is provided having a large hole at one end, which passes over a small peg in the top of the first post. This should allow the pole to move both up and down and sidewise. By swinging the pole around the basket can be filled at the bin, then immersed a moment in vessel No. 1; and then swung over to vessel No. 2, where the grain is treated ten minutes. Every minute or so the basket must be raised entirely out of the water and allowed to drain. The pole can be supported on a peg or fork in the second post while the basket is draining. Finally, the pole is lifted entirely over the second post and the grain is spread out to dry. Of course this arrangement is necessary only when large amounts of seed are to be treated. For small amounts a tub of warm water and a common wash boiler on a cook stove for the scalding water will answer every purpose.

There are many possible modifications of the hot water treatment that are more easily used than the one here given, but whenever they have been tested on a large scale they have proven uniformly less successful in preventing smut than the method here given, and do not give as great an increase in yield. They are, moreover, not nearly as convenient as the potassium sulphide or bluestone and lime methods.

[TO BE CONTINUED.]

The lop-sided demurrage charge which is exacted only from the helpless and the apathetic must be abolished.

THE METRIC SYSTEM.

An interesting report has been made by Mr. Charles W. Stone of Pennsylvania in favor of a bill for the adoption of the metric system of weights and measures, which has been for some weeks before the House Committee on Coinage, Weights and Measures. The troy pound of the mint is resorted to as the only source from which to derive the avoirdupois pound for common use, and yet this troy pound, while answering the purposes of comparison in the mint, is of uncertain accuracy. The primary standard of length, the three barleycorns, round, plump and dry, which make an inch, proves but an indefinite guide.

The size of our quart, gallon, bushel and barrel is elastic or adjustable, the report says, and depends on the commodity to be measured, the place where it is measured, and formerly in Pennsylvania, at least, the purpose and persons for whom measured. Vermont, however, seems to have reached the climax of absurdity, when she provided by comparatively recent legislation, still in force, that in measuring certain specified commodities one bushel and three-quarters of a peck shall be deemed a bushel.

The standard bushel used by the United States in the custom houses and furnished as standard to the various states is 3 per cent. smaller than the standard bushel of Great Britain. The bushel of oats varies from 26 pounds in Maryland to 36 pounds in Oregon and Washington. The bushel of barley weighs 32 pounds in Louisiana, and 50 in California. The laws of New York and Oregon make 42 pounds of buckwheat a bushel, while those of Minnesota and Nebraska call for 52 pounds, and Kentucky 56 pounds. The bushel of rye weighs 52 pounds in Louisiana, but grows to 56 pounds in Ohio. Potatoes weigh 50 pounds to the bushel in Washington, 56 in Pennsylvania, and 60 in Ohio.

In Maine 44 pounds makes a bushel of apples, while 57 are required in Wisconsin. A bushel of salt weighs but 50 pounds in Virginia, and several of the states, but reaches 70 in Massachusetts, and brings down the scales at 80 in Colorado.

Strong arguments are then advanced in the report for the adoption of the uniform metric system. The simplicity of the system, it says, is one of its great merits. It has but one system for every kind of weight and measure. The method of written expression is the one of ordinary numerical notation. The fundamental unit is the meter, and from that are derived by the simplest process not only measurements of extension, but of weight and capacity as well.

Referring to the objection that the words and terms of the metric system are foreign and too long for convenient use, the reply is made that the terms are not simply for American use—they are for all nations.

The ease with which other nations, except France, where vacillating legislation and revolutionary disorders impeded the work, have made the change of systems has been surprising. Germany changed to the compulsory system in two years, Austria in three, and without friction or trouble.

The conclusion reached by the committee is that the metric sytem of weights and measures should be adopted by the various departments of the government, although not deeming it wise to change the methods of surveying public lands. They recommend, therefore, that its adoption by the departments be fixed for July 1, 1898, and by the nation at large, coincident with the dawn of the twentieth century, Jan. 1, 1901.

Something new in the insurance business is the proposed organization at Louisville, Ky., of the Warehouse Receipt Insurance Co., to guarantee to holders the genuineness of warehouse receipts and offer indemnity for loss thereon.

Grave charges are made by the press against the authors of the Ohio crop report. The Chicago Times-Herald says the report was held back for speculative purposes, and that they printed the report substantially on Thursday last. The Ohio Bureau of Agriculture cannot afford to remain silent under what we all feel to be suspicious circumstances.—Toledo Market Report.

QUESTIONS FOR NEW YORK GRAIN MEN.

The New York Produce Exchange Reporter recently published the following questions, which it received from a member of the Exchange:

"What the members of the Exchange think of 'the Honorable Committee' sent to protest against the 'Grain Elevator Bill' which 'Bill' would operate to lessen terminal charges and bring wheat to this port?

"What our president thinks of this committee he appointed and its action?

"Did he appoint them for this purpose, and if so, does he still think they fairly reflect the sentiment of the Exchange?

"Did this committee represent the International Elevator Co. and the Brooklyn Wharf & Warehouse Co. more than the Exchange?

"Why a public meeting isn't called and a committee sent to Albany really representing the Produce Exchange?"

If those who suffer from the extortion of the New York elevator men are earnestly desirous of securing relief they should ask the state to enact new laws which will regulate the public elevator men as was originally intended. The state has no right or power to go into the elevator business, but it can describe a public elevator and provide laws for its regulation. The pool announces that it does not receive grain for transfer, but offers to receive and elevate it for ⅝ and store it for the first 10 days for ¼ of a cent. In other words its charge for transferring grain is ⅞ of a cent, or $1,750 for transferring a cargo of 100,000 bushels at Buffalo and New York.

In the face of this robbery New York should not be surprised at the loss of the grain trade. When all shipments have been diverted from it by the reasonable rates of other routes the pool may reduce charges on its own accord.

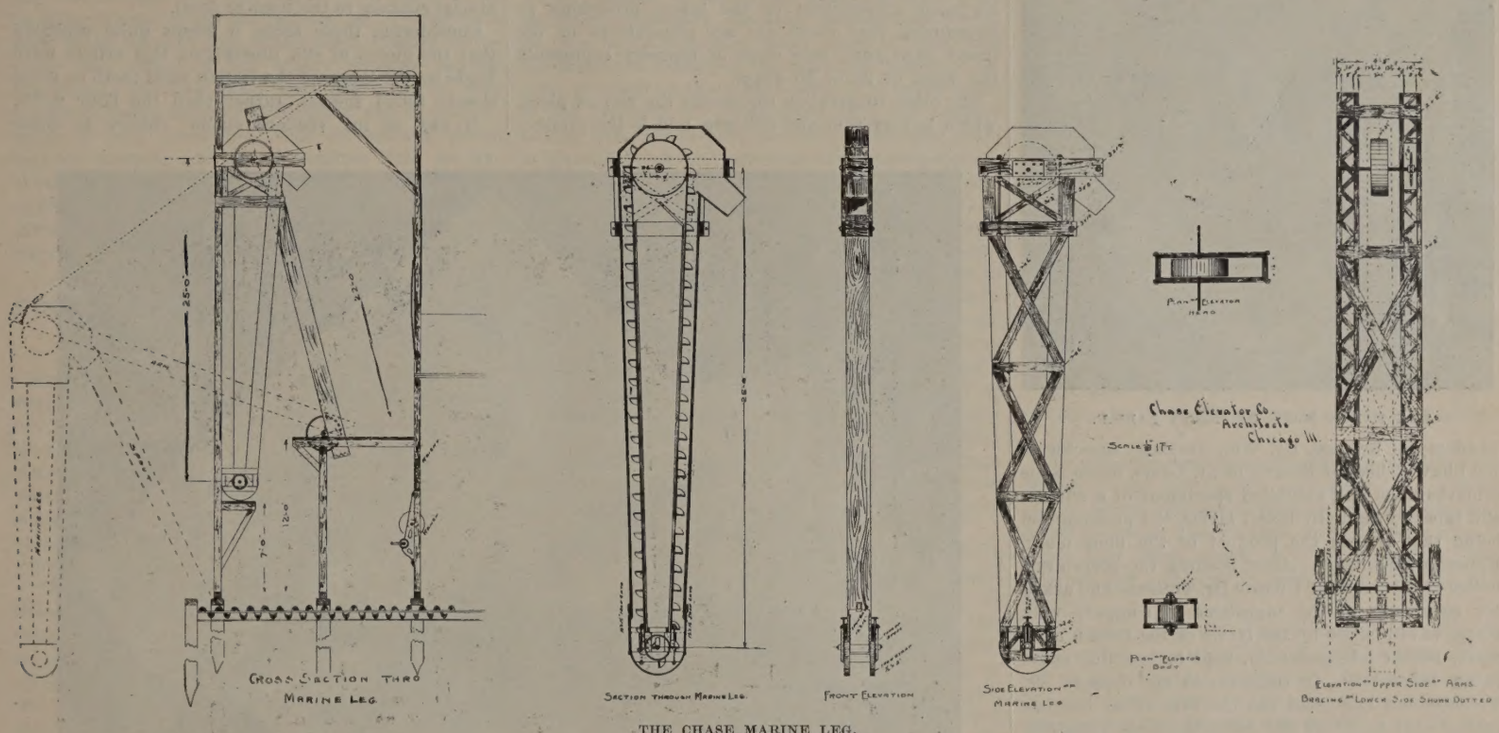
The New York committee did perfectly right in protesting against the state going into the elevator business. That is not necessary, as the trouble can be remedied in a much easier and a better way. Every elevator receiving grain of different owners for elevating, cleaning, blowing, storing or transferring is a public elevator and subject to state regulation or at least should be in New York state. In theory the Buffalo elevator men do not transfer grain. They say they will not receive grain for transfer, and will not admit that they have done so, but in fact they often transfer thousands of bushels daily that does not go to a bin.

It is gratifying to know that someone on the Produce Exchange has the courage to announce his convictions, and to denounce a committee clothed with official authority by the Exchange which works for the elevator men to the detriment of the other members of the grain trade.

THE CHASE MARINE LEG.

All the cleaning elevators and some of the storage elevators at lake ports have in recent years been equipped with marine legs. The cleaning houses, especially those equipped with driers, have found a marine leg a profitable investment, as many cargoes wet in transit have been taken to a house so equipped and unloaded and placed in condition for reshipment. The elevating capacity of the marine legs varies, 8,000 to 15,000 bushels an hour. As vessels are built larger these legs may be built larger to meet the demands of the trade. So far one for an elevator has answered the purpose of the houses at Western lake ports, but at Buffalo, where the bulk of the grain is received from lake vessels, the modern elevators have two and three marine legs.

The illustrations given herewith show different views of the plans of the marine leg designed by the Chase Elevator Company of this city. It is greatly reduced from the original drawings. When not in use the leg is drawn up into the tower and securely fastened. When it is desired to elevate grain from the hold of a vessel the leg is dropped down from the tower, a strong arm or brace holding it in position. As the grain is removed the boot descends farther into the hold of the vessel and keeps in contact with the grain, which is shoveled to it. From the head of the leg the grain is spouted to a screw or belt conveyor and taken into the house.



THE CHASE MARINE LEG.

Grain trade news is always welcome to our columns.

John Carlston of East St. Louis, Ill., an employe of the Star Elevator Co., recently brought suit against the company to recover damages for the loss of a finger. He was awarded $500.

J. R. Berry recently transferred a bucket shop business from Omaha, Neb., to Council Bluffs, Iowa, and soon after transferred himself and outfit to an unknown locality, leaving sundry speculators to mourn their losses and their money.

C. C. Viall & Co., Chicago bucket shop operators, who have had branch offices at Ames, Boone, Jefferson and other towns in Iowa, are reported to have closed up on an upward tendency of the market—a common habit of bucket shops.

GRAIN AND FEED RETAILERS ORGANIZING.

The marked activity of the grain, flour and feed retailers of the large cities in forming associations is decidedly encouraging, for if they are successful the receivers and shippers of those markets will follow suit. By organized effort greater improvement in the methods of conducting the business is possible, and the members of the trade as a class can advance and protect their interests to much greater advantage. In no market are receivers and retailers making more persistent and sincere efforts to lift the trade up out of the mire than in Cincinnati.

In order to place the consumers at rest and to relieve them of any erroneous ideas they may have regarding higher prices the promoters of the association have sent out a circular letter to grain, hay and feed purchasers explaining the object of the association as follows:

"The custom of buyers allowing their feed bills in many cases to remain unpaid so great a time that the profits are absorbed by loss of interest on money invested, has caused the trade to adopt a system which will be beneficial to both consumers and dealers.

"The Grain, Flour and Feed Dealers' Association is not in any way a trust or monopoly, as each firm can sell at such prices as he may wish; the only intentions are to facilitate collections, as it is organized to systematize the trade and correct abuses of credit by which the prompt customer will reap the benefit in equal proportion as the members of the organizaiton, by being able to purchase for cash or prompt payment at more reasonable prices.

"After free consultations with the trade and consumers, it is mutually agreed that all bills contracted during any month shall be due and payable on or before the first of the following month, and all bills remaining unpaid by the middle of said month forfeits the further credit of the buyer, and no member is permitted to sell such delinquent except the member to whom he is indebted, and then for cash only.

"The objects of this association are to protect members from irresponsible customers; to reform abuses, and circulate principles of equity and justice in the feed business; to encourage frequent intercourse and consultation among its members; to prevent or facilitate speedy adjustment of business disputes, and to collect, preserve and disseminate to members valuable information."

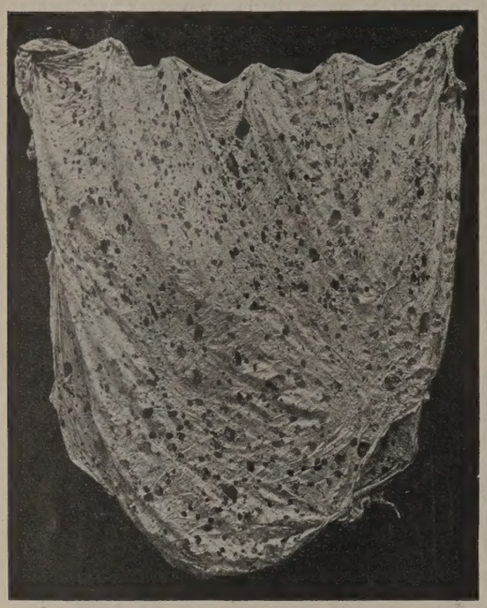
The dealers who do not join the association and help in promoting the interests of retailers will find

much consolation in the cheerful thought that the only new customers which they will get will be the non-paying ones, who cannot buy of association members. In other words they must do a cash business or they will soon be bankrupts.

SILK FABRIC MADE BY INSECT LARVÆ IN GRAIN STORE-HOUSE.

BY PROF. W. G. JOHNSON, CHAMPAIGN, ILL.

I wish to present one of the most remarkable products made by insects that has ever come to my notice. At the February meeting of the St. Louis



SILK FABRIC MADE BY INSECT LARVÆ.

Academy of Science, Dr. Wm. Trelease, director of the Shaw School of Botany of St. Louis, made some remarks upon and exhibited specimens of a curious silk tapestry made by insect larvæ, the presumption being that it was the product of the flour moth, Ephestia kuehniella. After reading the secretary's notice of this meeting I wrote Dr. Trelease and asked for specimens of the tapestries to compare with pieces of silk made by the larvæ of the Indian meal moth, Plodia interpunctella, kept in breeding cages in my laboratory. In response to my request, Dr. Trelease not only sent me the tapestries, but has turned over to me all the correspondence regarding the material, including the paper read by him before the Academy, from which I quote the following:

"In September, 1894, Dr. Francis Eschauzier of San Luis Potosi, Mexico, a gentleman who has shown much interest in the natural history of the mountain region of Northern Mexico, sent me a piece of thick parchment-like substance nearly three feet square, stating that it was cut from a piece over twenty yards wide and about four times as long, manufactured by a worm on the ceiling of a corn-storing loft. The specimen is nearly white and has much the appearance and feeling of a soft-tanned piece of sheepskin, but is marked by numerous yellow or brownish stripes. As a rule the surface is as smooth as that of a piece of dressed leather, but here and there dingy fluffy masses are found which are easily removed, leaving abraded rough places. While as a whole the membrane is continuous from one side to the other, and of nearly uniform thickness, there are places where, as Dr. Eschauzier had observed before sending the specimen to me, as many as four distinct and more or less separable layers are observable. Throughout the specimen is perforated by many round or elliptical holes from the size of a pinhole up to nearly a half inch in diameter, many of them more or less occupied by the dingy fluffy material already mentioned as occurring in places on the surface.

"A year later Dr. Eschauzier sent me two additional pieces of similar material, but of a gray color and of extreme tenuity, like the first, perforated by frequent holes. These specimens are comparable with the loose material observed here and there on the first specimen, but in continuity and uniformity of thickness they resemble the larger piece. At first all of the specimens emitted a strong odor of flour, as was to be expected, considering their source. These curious pieces of tapestry are composed of myriads of fine silken threads crossing and recrossing at every conceivable angle, and so producing the seemingly homogeneous texture. Unfortunately Dr. Eschauzier has not yet succeeded in obtaining specimens of the creatures by which they are produced, but there is no doubt that they are the work of lepidopterous larvæ which feed upon grain, and the presumption is that they are made by the larvæ of what is called the Mediterranean flour moth, Ephestia kuehniella."

I have had these fabrics photographed and present them herewith. The one with the edge tacked back represents the first mentioned piece, and is truly a remarkable texture. Instead of being made up of four distinct layers, as indicated above, I am of the opinion that each of these layers is made up of from 40 to 50 distinct layers; that is, the whole thickness probably represents 150 or 200 layers, or as many generations of the insect producing it. Presuming that there are six generations of the insect each year, this piece of tapestry represents the work of 25 or 30 years.

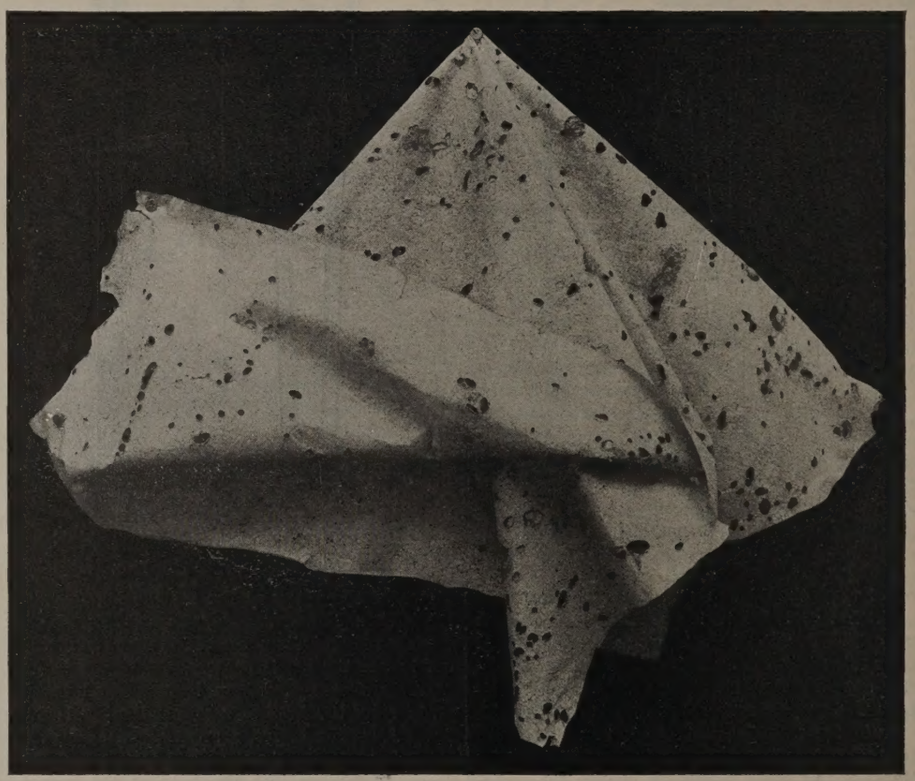
The other illustration represents the second piece, which is very thin and delicate, and is the product of one or two years' work. It is as soft as the finest piece of silk paper, and agrees exactly with a piece of silk taken recently by me from one of my breeding cages in which I have a colony of the Indian meal moth. The "fluffy masses" on the first mentioned piece are, without doubt, the remnants of cocoons. The surface clearly indicates that it was attached to the ceiling of the granary, and that the larvæ crawled under it, where they spun cocoons and transformed. The holes are made, no doubt, by the larvæ as they endeavor to conceal themselves under the fabric for pupation. On holding the large piece up to the light one can see clearly that many of the former perforations have been covered by layers of silk; some by a mere film, while others are thicker.

I am of the opinion that the insect responsible for this cloth is not the Mediterranean flour moth. If we stop to consider that the tapestries in question are formed on the ceiling of the granaries, and that the corn is stored below, we are led to conclude that the fabric is the product of an insect that is a prolific spinner during its migratory period, and that it colonizes readily in stored grain.

We have such an insect, and it is popularly called the Indian meal moth, Plodia interpunctella. This little moth has a great variety of food products, and has a wide distribution. It is a serious pest to stored corn in many places, and has this year done much damage to stored grains in Central Illinois. When feeding in grain, the larvæ of this moth spin little if any silk during their growing period; but when full grown they leave their food and crawl to some angle or corner where they pupate. During this migratory period they spin very fine silken threads wherever they go. Thus when hundreds and thousands of the worms are crawling, a fine delicate fabric is soon constructed. I have a large colony of these creatures in my laboratory, and have repeatedly taken large pieces of silk of the finest texture from the tops of my breeding cages. The sides of the cages are usually so thickly lined inside with this silk, that I have some difficulty in seeing what is going on within. In my flour moth cages I do not have any trouble, the silk being confined almost entirely to the flour or meal.

Considering these facts, it seems quite probable that the pieces of silk illustrating this article were made by the larvæ of the Indian meal moth or some closely allied species, rather than the flour moth.

If any of my readers should chance to come across any insect in stored grain or in mills in Mexico or any other place, I hope they will forward me specimens for examination. I shall be pleased to answer any query to the best of my ability, and will keep the confidence reposed in me.



SILK FABRIC MADE BY INSECT LARVÆ.

A case of interest to grain men is that of the Fergus Flour Mills, Fergus Falls, Minn., vs. the Western Union Telegraph Co. for the recovery of $1,320 damages alleged to have been sustained by an error made in a dispatch while in transmission. The complainants claim they wired to the Brooks Bros. Elevator Co. of Minneapolis that they would buy 10,000 bushels wheat at 57½ cents, but that the dispatch was delivered to the elevator company reading 2,000. When the grain reached the mill the error was discovered. The telegraph company refused to supply the remaining 8,000 bushels, and the complainant had to buy grain elsewhere at 74, hence the suit for the difference.

"HOLD YOUR WHEAT" IN ANOTHER MAN'S ELEVATOR.

A striking illustration of the "hold-your-wheat" doctrine of four years ago has just been aired by an Otter Tail County man in the District Court, Hennepin County, Minnesota. D. S. Wimple, a farmer living west of town, had 3,000 bushels of wheat, and the price was 90 cents. He decided to hold it for a rise and wrote the Northwestern Elevator Company for a special arrangement for storing it for him. He claims that it agreed to receive the wheat and to cash it at any time for 13 cents less than the Duluth market price, without storage charges. He took his wheat to the elevator, and, as the agent had only the ordinary form of storage receipts, those were issued to him. The elevator company shipped and sold the wheat while the price was high and retired from business. Wheat continued to drop, and when it got down to the 40-cent basis and showed no signs of rallying, Mr. Wimple decided to cash up.

The elevator company claimed storage charges, and after deducting them from the present price of wheat there was but 9 cents a bushel coming to Mr. Wimple. He decided to let the tail go with the hide, or in other words, to let the balance go in attorney's fees, so he brought suit in Hennepin County to recover the value of his wheat without paying the storage charges. The court held that he was unable to prove his special contract, and in the absence of such proof held that the storage ticket was the contract, and decided against him. As Mr. Wimple got 33 bushels to the acre this year, and has 14,000 bushels on hand, stored this time in his own granary, he has decided to appeal the case to the Supreme Court.

COST OF RAISING CORN IN KANSAS.

Kansas is certainly a great corn state. Statistics show that the average annual yield for the 34 years, bad seasons and good, since 1861, has been 27 bushels per acre for the entire state, ranging in different years from 9 to 48 4-5 bushels. The product for 25 years ending with 1895 has had an annual home value averaging more than $31,000,000, and a total value in that time exceeding $776,000,000.

Secretary Coburn, in the March quarterly report of the State Board of Agriculture, presents a report showing from 68 long-time extensive growers, in 45 counties which last year produced 140,000,000 bushels, giving from their experience "on such a basis as others can safely accept" each principal item of cost in growing and cribbing an acre of corn, estimating the yield at 40 bushels. About two-thirds of those reporting prefer planting with listers, and the others use the better known check-row method, after the land has been plowed and harrowed.

The statements of all the growers summed up, averaged and itemized, show the cost of raising an acre of corn to be as follows:

Seed	$ 0.07
Planting (with lister, or with check-row planter, including cost of previous plowing and harrowing)	.77
Cultivating	1.03
Husking and putting in crib	1.18
Wear and tear and interest on cost of tools	.25
Rent of land (or interest on its value)	2.41
Total cost	$ 5.71
Cost per bushel	.14¼
Average value of corn land per acre	29.25

The showing made by 43 growers who plant with listers, or have found that method preferable, shows the cost per bushel to be 13½ cents, and statements of cost where the land is plowed, well harrowed, and planted with the ordinary check-row machine, show the cost per bushel to be 16 cents.

Commenting on these figures Secretary Coburn says: "In none of these calculations has there been made any allowance for the value of the cornstalks, which ordinarily, under the crudest management, should offset the cost of harvesting the grain, and under proper conditions should have a forage value much in excess of such cost. Taking these into every estimate, as should rightly be done, the showing of cost per bushel would be very sensibly diminished. In the results of this investigation it will likewise be noted that the rental for these Kansas corn lands, or the interest figured by their owners on the investment represented, averages more than 8¼ per cent., or a net rate higher than the capitalist, general banker or money-lender dreams of realizing.

MANITOBA'S ELEVATOR SYSTEM.

In an address made recently before the immigration convention F. W. Thompson, a delegate from the Winnipeg Grain Exchange, said:

The means enjoyed by the farmers [of Western Canada] for disposing of their products are not excelled by any country, and they are paid in cash for their grain. The elevator facilities existing at the present time are sufficient to handle, if necessary, 100,000,000 bushels of grain in less than six months' time. From this it will be seen that if the farming population were doubled the present elevators could handle their crops—even if the enormous yields of 1895 were repeated. This magnificent system affords a ready market at all times and seasons of the year.

The producer of wheat can have the grain from his wagon unloaded, elevated, cleaned and loaded on cars in an incredibly short space of time, and the moderate charge of 1½ cents per bushel, I believe, is based on the actual cost. It is unfortunate in the interests of immigration that the benefits arising from the present methods of handling grain in Manitoba and the Northwest are not properly understood and appreciated by our own people—largely, I may say, through lack of conception, or rather, of ignorance of the disabilities under which most of the other wheat-producing countries labor. Were it not for the very excellent elevator system in force here, the cost of transportation would necessarily be much higher than at present. The railways would require to increase their present rolling stock probably 75 per cent. to handle the same quantity, and the added expense of this would simply be beyond comprehension, rendering the satisfactory handling and marketing of a mixed crop an utter impossibility and instead of a great deal of grain being cleaned at the inital point, masses of dirt would be shipped with the grain, and freight paid thereon, to the positive loss of the producer.

It is but right and just to our country that there should be no misrepresentation in this important matter. There is nothing to my mind so likely to render futile the efforts of a convention like this to develop the vast prairies of this country, as senseless agitation against the elevator system. It is within the right of any person or persons to erect an elevator or elevators anywhere in Manitoba and the Northwest Territories along the lines of railway under exactly the same terms and conditions as those already built, the markets being free and open to anyone who chooses to engage in the business.

HOT WINDS AND WHEAT.

The Northwest Elevator Company of Minneapolis is sending the following circular to country correspondents: "It has been demonstrated beyond cavil that the prime enemy to the maturing of wheat in certain portions of the Northwestern and Southwestern states is the hot winds which strike about the time the wheat is in the milk or dough, thus shrinking the kernel and depreciating the grain in weight and quality.

The remedy—A drill should be used in putting in the seed. The drill should be run from east to west, and never from north to south.

Why?—A drill should be used because the grain is better covered and the roots better protected, and therefore better able to withstand a dry spell.

Why from east to west?—Because the hot winds come from the south, and if the rows of grain run from north to south it has free access through the rows of grain to the roots, whereas if the rows run from east to west the first few rows would form a barrier to the wind getting at the roots, and each row would shade its neighbor from the heat of the sun's rays, and thus prevent the roots from drying out.

DOTS . AND . DASHES

Send us reports of the acreage and condition of the growing crops in your district.

Colorado wants 80 pounds of salt in its bushel, while Massachusetts is content with 70, and Virginia requires but 50 pounds.

There have recently been some oats exported to Great Britain. Prices are low, but low ocean freights made it possible.

The Kansas City Board of Trade will send representatives to the South and West Grain Trade Congress, which will meet at Charleston, S. C., April 29.

The grain shovelers have organized at Buffalo, N. Y., with a membership of 600. An effort will be made to get a large majority of the shovelers in the city to join.

Should a person purchase oats in Maryland for delivery in Oregon, he would find that it requires 10 pounds more in the latter state to make a bushel than in the former.

J. N. Galloway, a grain commission man of Superior, Wis., was arrested recently on the charge of embezzlement. Six farmers from North Dakota and Minnesota accuse him of defaulting in the sum of $1,527.67.

Advance sheets of the annual report of the Illinois Railroad and Warehouse Commission for 1895 show that the average tariff on all kinds of freight, local and through, does not exceed 1.35 cents per ton per mile, being 80 per cent. lower than 1870.

Van R. St. John of Mt. Pulaski, Ill., writes us as follows: "I have taken your valuable journal, the AMERICAN ELEVATOR AND GRAIN TRADE, for some years, and cannot see how anyone engaged in the elevator business can get along without it."

New freight rates on corn from points in Kansas to Galveston and New Orleans have been adopted by all railroads in Kansas, and put into effect April 1. In some cases rates were increased; in others reduced, an equitable adjustment being the object in view.

The metric system was officially adopted in Turkey March 1, and will be the only system of weights and measures allowed to be used. Local authorities called together the various trade corporations in order that they could provide themselves with weights and measures in conformity with the new system.

At Wesley Council's elevator at Williamsville, Ill., the problem of getting rid of corn cobs has been solved by building a cob burner. It is round, about 75 feet in circumference and some 30 feet high. The cobs are run directly into this burner from the separator. An outside grate allows a fire to be started. No doubt the cobs are got rid of by this method, but it is a waste that might be used for power.

Mr. J. A. Baxter of Waveland, Shawnee County, Kansas, who raised as high as 104 bushels of shelled corn per acre in 1895, writes the State Board of Agriculture that "The portion of my crop giving a yield of 104 bushels of husked, well dried (56 pounds, shelled) corn per acre was 5 acres of 57 I planted last year. My land is slightly rolling prairie, and about a fair average of Kansas soil, with a hard, impervious subsoil. The 5 acres mentioned were at one end of a 25-acre field, part of which had been in potatoes for two years, and the last crop dug with a listing plow late in October, which was about equivalent to a deep fall plowing."

In the case of F. G. Logan & Co. vs. Dennis E. Sibley, of the Sibley Elevator Co., Chicago, the verdict recently rendered awarded the plaintiffs $25,000 damages. In 1892 F. G. Logan & Co. had a claim of about $21,000 against Sibley for deals on the Board of Trade, and began an attachment suit. This was followed by a levy on 464 shares of the stock of the elevator company which was supposed to belong to defendant. Others claiming an interest in the stock entered suit as interpleaders. The jury returned a verdict sustaining the claim of Logan & Co. against Sibley, but finding against them on the attachment. The jury found that the title to the property attached is in the interpleaders. The plaintiffs entered a motion for a new trial.

THE IRREGULAR DEALER'S SOLILOQUY.

BY J. E. B.

To buy, or not to buy; that is the question.
Whether 'tis better to try and gain a hard earned competency
By shady measures, or to become known as regular,
And in becoming so, throw off the stigma that does now
Envelop me. To buy, to make some money,
Perchance to gain the enmity of others.
Aye, there's the rub. For who on earth
Does not desire to have the good will of his fellows,
And know that sweet refreshing sleep
That only comes to him who bears upon his conscience
No quota of alarm for future safety.
If I, with my shovel, can work so great a detriment
To honest labor, shall not all sincere souls
Abhor me? Yet I will have my money;
And this thought does almost nerve me to this wrong.
What matters wrong that does not touch ourselves,
But rather advances us in life's success,
Of money getting? What matters honor
If its loss is compensated for with yellow gold?
This thought does conquer all. My soul is nerved
To this dark deed. Come loss of friends,
Come death, come hell, I'll buy irregularly.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

WORK FOR THE ADOPTION OF THE METRIC SYSTEM.

Editor American Elevator and Grain Trade:—Everyone who now takes part in urging the reform of our present system of weights and measures and the adoption of the metric system will never regret it if the reform is once brought about. But those who, knowing the beauty and utility of the metric system, yet fail to aid in its adoption will, in my opinion, fall short of performing their whole duty.

Very truly yours,
DENIS M. HURLEY, M. C.

Washington, D. C.

OPPOSED TO WAREHOUSE LAW.

Editor American Elevator and Grain Trade:—The bill providing for public warehouses in Iowa has been voted out of existence in the legislature, so no further controversy is necessary. However, you can put us on record as being opposed to any such legislation for Iowa. We cannot see that such a measure would be of any benefit to anybody in the state, while it would be a considerable expense for someone to pay for.

Yours truly, BARBOUR & YOUNKIN.

New Sharon, Iowa.

SHIPPING AT TACOMA.

Editor American Elevator and Grain Trade:—According to the report of the harbormaster of the port of Tacoma, Wash., for the month of March, the total exportation of breadstuffs was as follows: Wheat, 227,823 bushels, valued at $137,446; flour to China, 11,478 barrels, valued at $34,434. The inward registered tonnage was 41,277, inward cargoes 3,280 tons; outward registered tonnage 41,919, outward cargoes, 46,486 tons. The deep sea arrivals were 36, departures 31.

SAMUEL COLLYER,
Secretary Chamber of Commerce.

Tacoma, Wash.

EXPERIENCE WITH SHORTAGES.

Editor American Elevator and Grain Trade:—It is amusing to note the various ideas of the cause of shortages on shipments. It has been about the same with me as with other shippers; that is, shortages have occurred of from 5 to 50 bushels to the car.

An amusing instance in connection with a shortage occurred when I was shipping corn to a city at the mouth of the Kaw River in Missouri. I shipped out five cars, two of which were unloaded at an elevator in the city and three were shipped to points in the West. Now the result: One car unloaded at the elevator lost 7 bushels, and the other car 8 bushels. This was about the same as usual, only the shortage was not so great because in loading the cars good weight had been given. Of the three cars that went farther West the first weighed the same as when it was loaded, the second gained 3 bushels, and the third gained 3½ bushels.

When complaint was made at the elevator where the shortages occurred, they said that the air was lighter—or heavier, I don't know which—out West, and in consequence thereof the corn increased in weight. Funny, was it not?

I have made many shipments of grain and feed, all weighed on first-class elevator scales and put in new cars which precluded the possibility of a leakage, and still the shortages were the same—from 6 to 8 or 16 bushels per car. On the other hand, grain weighed over the same scales and shipped to local parties (at a distance of 50 to 100 miles) ran out even in weights, and in many instances gained one-half to one bushel. The gain was caused by my liberal weighing in so as to allow the customary shrinkage of 90 pounds per car.

K. W. EDWARDS.

IOWA DEALERS ORGANIZE ANOTHER ASSOCIATION.

Editor American Elevator and Grain Trade:—At the second preliminary meeting of the grain men of Southwestern Iowa and Northwestern Missouri, which was held at Red Oak, Iowa, March 19, an association was organized, and is now well on its feet. The name adopted was The Grain Men's Association of Southwestern Iowa and Northwestern Missouri. The officers elected were: R. R. Palmer of Creston, president; R. Van Schoiach of Griswold, vice-president; G. B. Stebbins, Red Oak, secretary, and Joseph Samuels of Riverton, treasurer, all of Iowa.

The aims and purposes of the organization are to confine track bids to legitimate and reputable grain buyers and shippers. Also, we desire to take advantage of the mutual benefits to be received by combination.

We started out with a membership of 40, all there were at the meeting, and we have a prospective membership of some 200, and the best of feeling exists.

Yours, W. H. CHAMBERS.

Hepburn, Iowa.

GRADING CORN AT CHICAGO.

Editor American Elevator and Grain Trade:—It seems that there are some members of the grain trade who always overlook the fact that the Chicago market is a speculative one, and it is necessary to maintain the grades very rigidly. In the Chicago market grain of the contract grades is often kept in store many months after its arrival, and if the inspectors were not exceedingly careful in grading it some of it would spoil while in store. The marketman of the Chicago Tribune recently said:

"Grain receivers say that the criticism made with regard to the difference in grading by the State Inspection Department at Chicago and at outside points through the state might be extended to corn as well as oats. They claim that corn which grades here No. 3 and No. 3 yellow will invariably grade No. 2 and No. 2 yellow at Peoria, and argue that this is unfortunate, especially as so much of the corn movement is being diverted from Chicago by railroad discrimination and the export business at Galveston and New Orleans."

The inspection department at Chicago is under state supervision, while that at Peoria is not, and Peoria is a consuming market, while Chicago is not. Little corn is kept long in store at Peoria, so there is no necessity of grading it rigidly. However, the claim that the inspectors of the two markets give the same quality of corn a different grade does not alter the market value of the corn in either city. Let the Peoria inspectors call corn which grades No. 3 yellow in the Chicago market No. 2, or even No. 1 Snakes if they wish, that does not interfere with the value of corn in Chicago.

The rules governing the grading of corn at Chicago provide that

No. 3 corn shall be mixed corn reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

No. 3 yellow corn shall be three-fourths yellow, reasonably dry and reasonably clean, but not sufficiently sound for No. 2.

The Peoria rules provide that

No. 2 corn shall be mixed in color, sound, dry, sweet and reasonably clean.

No. 2 yellow corn shall be three-fourths yellow in color, sound, dry, sweet and reasonably clean.

The Peoria rules do not provide for the same grading as the Chicago rules, although the same grade names are used in classifying the grain. The Peoria grades of same name are not a full grade higher than the Chicago grades, but about one-half to one-quarter grade higher.

The Chicago inspection may not be satisfactory, still the excuse found by the receivers in the foregoing clipping taken from the Tribune is not a good cause for kicking.

Very truly, L. B. LYMAN.

RICE AT NEW ORLEANS.

Editor American Elevator and Grain Trade:—Following is an account of the movement of the 1895 crop of rice at New Orleans to April 1, 1896:

Rough rice, in sacks: Receipts during March 22,590, against 9,099 in March, 1895; receipts from Aug. 1, 1895, to April 1, 1896, 1,084,502, against 670,462 during the corresponding period of 1894-95. Distribution during March 49,296, against 50,389 in March, 1895; distribution from Aug. 1, 1895, to April 1, 1896, 960,433, against 553,503 in the corresponding period of 1894-95. Total stock in first and second hands: Aug. 1, 1895, 45,469; April 1, 169,538 in 1896, 160,348 in 1895; March 1, 196,244 in 1896, 201,638 in 1895.

Clean rice, in barrels: Receipts during March 381, none in March, 1895; receipts from Aug. 1, 1895, to April 1, 1896, 4,645, against 363 during the corresponding period of 1894-95. Sales reported during March 10,573, against 11,967 in March, 1895; since Aug. 1, 1895, 217,047, against 143,343 during the corresponding period of 1894-95. Total stock in first and second hands: No. 1 April 1, 22,898, against 8,707 April 1, 1895; March 1, 23,841, against 9,984 March 1, 1895; No. 2, April 1, 4,196, against 497 April 1, 1895; March 1, 5,458, against 163 March 1, 1895.

HY. H. SMITH, Secretary Board of Trade.

New Orleans, La.

SUFFERING FRON RANK RAILROAD DISCRIMINATION.

Editor American Elevator and Grain Trade:—The grain dealers at this point have long been handicapped by low rates given to shippers of neighboring towns. James Harper & Co., Clark Bros. & Co. and myself have for several years been placed between two fires. Dealers on the line of the Chicago, Rock Island & Pacific and the Des Moines & Northern & Western Railroads have been able to pay more for both corn and oats than we could get offered for the same on track here by the same parties who made the bids from Chicago to those dealers.

It has been worse this year than ever before. We appealed to the Illinois Central for relief, when the traveling freight agent of that road was sent to investigate. He investigated the matter and found the situation just as we had represented. He had cash bids which had been made on the same day, and from the same commission house in Chicago which made its bids to us and dealers on other roads. Thousands of bushels of corn and oats have gone within three miles of this town to towns on other roads—the C., R. I. & P. and D. & N. & W.

It was so plain that there was a nigger in the fence somewhere that the Illinois Central Company promised to remedy the evil. It says it has done so, but still dealers at Clare, Moorland, Gilmore City and Rolfe on the C., R. I. & P., and Rockwell City and Jolley on the D. & N. & W. are offering more for grain than we can get for it on track here. The Illinois Central Railroad does not give us any protection whatever. Finally we gave notice that we would shut down our elevators if relief was not given. We cannot afford to pay help and keep up steam for two or three loads of grain. Prices of grain are so low that farmers will haul long distances for small increase in price. We are now investigating the matter further, and if the Illinois Central does not give us relief we propose to shut down until it does. We have storage capacity for 150,000 bushels of small grain, beside facilities for storing ear corn.

The fact of the matter is, Chas. Counselman & Co. operate on the C., R. I. & P., and they have large interests in that road, as have P. D. Armour & Co. in the D. & N. & W. These roads will and do protect their patrons. The Illinois Central has lost from this place this year the hauling of at least 600,000 bushels of grain by the course it has been

and is now pursuing. These roads are able to pull the wool over the eyes of the officials of the Illinois Central to a finish. It is like the Clark Street Jew who rubs down his customer and robs him at the same time. That is what the C., R. I. & P. and the D. & N. & W. officials are doing to the officers of the Illinois Central road. The latter are blind to their own interests, and the consequence is that they have lost over two-thirds of the crop that should have been shipped from this point. The C., R. I. & P. and the D. & N. & W. promises them and does nothing. I know it to be a fact that the D. & N. & W. offered our stock buyer here a rebate if he would haul his stock to a point on its line. That road has given rebates to others. The discrimination pertains to stock as well as grain.

Yours, T. E. MALDEN.

Manson, Iowa.

GRASS SEED.

Only a few states make a specialty of thrashing timothy and other grasses, exclusive of clover, for the seeds, says The Orange Judd Farmer. Out of nearly 3,000,000 returned to census takers in 1890, Iowa, Illinois and Minnesota, in the order named, reported a total of 1,786,000 bushels, or 60 per cent. The remainder of the seed was located chiefly in a half dozen of the older middle states, with Kentucky and Tennessee rather prominent. New York, which harvested 6,675,000 tons of hay from 5,243,000 acres mowed, saved less than 20,000 bushels seed, while Iowa, with about an equal acreage, thrashed out 761,000 bushels seed. Considering the prolific yield per acre of alfalfa, census returns from California, reporting only 2,218,000 tons hay harvested from 1,432,000 acres mowed, must be considered too low.

ST. LOUIS STORAGE RATES.

The storage rates adopted by the elevators of St. Louis, Mo., to apply during 1896, are as follows: On wheat, corn and rye 1 cent per bushel for the first 10 days or part thereof, and three-eighths of a cent per bushel for each additional 10 days or part thereof. On oats one-half of a cent per bushel for the first 10 days or part thereof, no charge for special bin, and three-eighths of a cent per bushel for each subsequent 10 days or part thereof. The charge for special bins will be one-half of a cent per bushel for all grains except oats.

On wheat, corn and rye from rail the charges are fixed at 3 cents per sack for the first five days, and 1 cent per sack for each subsequent 10 days or part thereof.

With these old-time prices ruling the elevator men must expect to invite the erection of new elevators. Big profits always attract competition.

EXTORTIONATE CHARGES ON CANAL COMMERCE.

The Canal Boat Owners' and Commercial Association of the state of New York say in a recent circular that the New York and Buffalo railroad grain elevator trusts have illegally collected nearly $9,000,000 since the elevator law was enacted, June 9, 1888. The steal on one canal boat load of oats amounts to $135. By this quadruple elevator toll method, the Erie Canal last season was worked to only one-fifteenth of its actual capacity. Note this comparison: Buffalo and Brooklyn, aggregate charges for elevating and trimming 100,000 bushels of grain, $3,087.50. New Orleans, same service on rail grain, only $125. Norfolk, same service, only $300. Newport News, same service, only $300.—Duluth Record.

The greed of the elevator companies seems to overshadow the interests of commerce and legitimate traffic. New York City complains of depleted commerce to southern cities, and as a remedy seeks to advance freight rates from Western to Southern ports, ignoring this question of cost at terminal points which feeds the pockets of corporations and a few individuals. No wonder New York squeals. The trade of the West which seeks the lakes is largely interested in a reform.—Toledo Market Report.

RICE IMPORTS AND EXPORTS.

According to the last report of the Bureau of Statistics, rice aggregating 434,000 pounds, valued at $15,690, was admitted free of duty under reciprocity treaty with Hawaiian Islands in February, against $17,055 pounds, valued at $406,000, imported in February, 1895; and in the eight months ending February 3,575,500 pounds, valued at $125,513, were imported, against 4,308,087 pounds, valued at $191,-810, imported in the same time in 1894-95.

Of rice imported free of duty none was exported in February, 1895 or 1896, and none during the eight months ending February, 1896, or in the corresponding period of 1894-95.

Dutiable rice amounting to 10,175,489 pounds, valued at $149,655, was imported in February, against 11,996,833 pounds, valued at $179,051, imported in February, 1895; and in the eight months ending February 44,509,173 pounds, valued at $670,594, were imported, against 77,583,623 pounds, valued at $1,274,646, imported in the same time in 1894-95.

Of dutiable rice we exported 955,186 pounds, valued at $14,030, in February, against 760,930 pounds, valued at $11,802, exported in February, 1895; and in the eight months ending February we exported 9,731,237 pounds, valued at $145,299, against 5,957,-624 pounds, valued at $94,388, exported in the same time in 1894-95.

Rice flour, rice meal and broken rice amounting to 1,895,510 pounds, valued at $24,578, were imported in February, against 4,665,886 pounds, valued at $65,219, imported in February, 1895; and in the eight months ending February 48,001,693 pounds, valued at $639,550, were imported, against 46,282,156 pounds, valued at $658,333, imported in the same time in 1894-95.

Of imported rice flour, rice meal and broken rice we exported none in February, 1895 or 1896, none in the eight months ending February, and 987 pounds, valued at $14, were exported in the same time in 1894-95.

JAPANESE RICE IN THE EUROPEAN MARKET.

The Japan Weekly Mail says: "Mr. Kaneko, Vice-Minister of Agriculture, spoke on the above subject at the general meeting of the Japanese Agricultural Society, held at Akasaka. Japanese rice was first sent to Europe about 24 years ago. At that time Japan had foreign debts to pay off every year, and the treasury department used frequently to send rice to London to be converted into money for use in redeeming the debts. Since then the export of rice has continued incessantly, though the quantity varies. The export has gradually increased, as will be seen by the following table:

	Koku.
1877, about	145,000
1887, about	243,104
1894, about	570,097

"A serious drawback to the exportation of Japanese rice to Europe is want of uniformity in the quantity and quality sent, and the consequent impossibility of giving any fixed quotation in the market.

"The rice exported to the continent of Europe has hitherto been shipped either to London or Hamburg, whence it is sent to other places. Japanese rice has become so well known in European markets that it is regularly quoted. The total amount of rice imported to London and Hamburg from various rice-producing countries is considerable. The amount received in London in 1893 was 434,300 odd tons (of which 17,354 tons were Japanese rice), and in Hamburg in the same year 403,350 tons, 6,333 tons being from Japan. The largest quantity of rice imported into London comes from India, and next in order come Japan, Siam and Saigon. More than two-thirds are sent from India, and as the Saigon rice resembles the Indian in quality, it is sometimes used to supply any deficiency in the latter. If the relative superiority of the cereal be considered, Italy ranks first, then Java, and third Japan. Neither Italian nor Java rice is grown in any large quantity, and those varieties are therefore only used by the highest circles. Japanese rice has therefore a good field before it in the European market. As the manner of cooking rice in Europe is different from the Japanese method, it follows that the standard is also different. What the Europeans call rice of the first quality is a lustrous, large, transparent and hard grain.

CHAFF

The bushel of buckwheat in Minnesota, weighing 52 pounds, gains 10 pounds when measured in New York, where 42 are enough.

The authorities of a number of counties in South Dakota are issuing seed grain to farmers on the plan employed last year. In Douglas County about 1,500 bushels have already been issued. It looks as if this was becoming a regular thing.

It is reported that there will be a scarcity of milling wheat in some parts of California before the next harvest. It is said that in San Joaquin County, which has hardly ever known a shortage, the wheat will be well cleaned out by local mills.

The Madelia Farmers' Warehouse Co. of Madelia, Minn., has brought an action against Austin M. Wood to collect $2,198.96, which it alleges is the balance due of $5,292.71 for twenty carloads of grain shipped to the defendant and sold by him.

The Commercial Exchange of Philadelphia has followed the action of New York and Baltimore in asking for a reformation of freight rates. It is contended that there is a discriminating inland freight rate in favor of Southern ports, and that the trunk line railroads constantly ignore the differentials.

Reed Fretz has sued the French Bros. Commission Co. of Kansas City, Mo., stating in his petition that the defendants keep a bucket shop, and that while entirely ignorant of their alleged style of doing business, he was induced by them to bet a total of $922 at various times during February and March.

One might go through the whole schedule of our weights and measures and find nothing but an arbitrary conglomerate of statutory enactments, having no scientific basis, no uniformity and no relation whatever between measures of extension and those of capacity. The adoption of the metric system will remedy this.

The metric system is the legal standard for weights and measures all over the world except in the United States, Great Britain, Denmark, Russia and Japan. We annually lose considerable trade with the other countries through the persistent use of the English weights and measures by our manufacturers and merchants in their circulars, catalogues and price lists.

Anderson Luker recently began suit against Claus Johnson at Clinton, Ill., to recover damages for the non-delivery of corn contracted for. Defendant sold plaintiff 3,000 bushels of corn at 45 cents per bushel, 2,000 to be delivered by May 31, 1895, 1,000 at option of Luker. The 2,000 bushels were delivered. Corn was 47 cents May 31, and the 1,000 bushels was not delivered. The court regarded it as in the nature of an option.

According to the last report of the Bureau of Statistics, barley malt aggregating 399 bushels, valued at $288, was imported in February, against none in February, 1895; and in the eight months ending February 3,144 bushels, valued at $2,831, were imported, against 8,397 bushels, valued at $5,097, imported in the same time in 1895-94. No imported barley malt was exported in February, 1896 or 1895, none in the eight months ending February, and 259 bushels, valued at $225, were exported in the eight months ending February, 1895.

A suit growing out of a speculation in corn on the Chicago Board of Trade several years ago between Lamson Bros. and Boyden & Co., both old and substantial firms, was recently settled by the finding of a lower court in favor of the defendant being affirmed by the Supreme Court. L. J. Lamson had sold short on a certain option which Boyden & Co. bulled with the result that Lamson had to settle in the sum of about $40,000. Afterward he brought suit to recover on the grounds of an illegal corner being operated, but the case went against him.

Charles Indeures has erected a brewery at Columbia, Cal.

W. A. Thistelthwaite will erect a brewery at Elco, Cal.

John Brewer's new brewery at St. Clair, Mich., is completed.

Louis Steinke's new brewery at Sheboygan, Wis., is completed.

A brewery is being erected at Auburn, N. Y., for C. A. Koenig.

Louis Doll has succeeded Robt. L. Haas, brewer of Bellefonte, Pa.

The Banner Brewing Co.'s new brewery at Chicago is completed.

A company has been organized at Freeland, Pa., to erect a brewery.

Ferle & Co. have succeeded Henry Ultsch, brewer, at Obernburg, N. Y.

The Quincy Brewing Co. intends to erect a new brew house at Quincy, Ill.

Lang & Martin, brewers of Missoula, Mont., have succeeded Martin & Lang.

The Mathie Brewing Co. of Wausau, Wis., has completed its new brewery.

The Lackawanna Brewing Co. has completed its new brewery at Scranton, Pa.

The Chattahoochee Brewery at Phœnix City, Ga., has been sold by the receiver.

The Waco Ice & Refrigerating Co. will build and operate a brewery at Waco, Texas.

M. Schmich & Co., brewers of Freeport, Ill., intend to erect a new brewery at that place.

Baruth & Schinkel have succeeded the F. A. Lux Brewing Co. of San Francisco, Cal.

The Union Brewing Co.'s plant at Lebanon, Pa., was sold by order of court March 17.

Michael Wagner has succeeded to the brewing business of Rosa Ries at Clearfield, Pa.

The Welde & Thomas Brewing Co. of Philadelphia will erect an addition to its malt house.

The Buerger Malting Co. of Mayville, Wis., is preparing to erect an elevator at that place.

W. E. Lewis has been appointed receiver of the Fort Schuyler Brewing Co. of Utica, N. Y.

The Kings Country Brewing Co., Brooklyn, N. Y., has been placed in the hands of a receiver.

Extensive improvements and additions are contemplated for the Star Brewery at Chicago.

Siegler & Schiemann, brewers of Chicago, have incorporated with a capital stock of $15,000.

Martin Miswald & Bros. organized recently at L'Anse, Mich., and have erected a brewery.

The Old Colony Brewing Co. of Fall River, Mass., is preparing to erect a brewery at that place.

J. M. Hemmisch's brewery at Melrose, Minn., which was burned some time ago, is being rebuilt.

The Wyandotte Brewing Co. has been organized at Wyandotte, Mich., with a capital stock of $40,000.

The Idaho Brewing Co.'s brewery at Moscow, Idaho, which cost $30,000, was recently sold for $5,600.

The Imperial Brewing Co. of Kamloops, B. C., has been dissolved. B. Wehrfritz will continue the business.

Buying barley in California, where fifty pounds are required for a bushel, would be very profitable for shipment and sale by the bushel in Louisiana, where but thirty-two pounds are necessary. Such is our "system" of weights and measures.

The John Kam Malting Co. has bought the Fred Hower Brewing Co.'s plant at Williamsburg, Brooklyn.

A receiver has been appointed to wind up the affairs of James Wallace & Sons, brewers of New York City.

The West Bay City Brewing Co., recently organized at West Bay City, Mich., has succeeded Jacob Knoblauch.

The Rhode Island Brewing Co. of Providence, R. I., has changed its name to the James Hanley Brewing Co.

Andrew Schneider, brewer of Plymouth, Wis., and formerly of the firm of Schneider & Sanders, died March 8.

The firm of Walster, Echnoz & Curty, brewers of Meadville, Pa., has been dissolved, Walster & Echnoz succeeding.

Moritz Hoffmann has purchased S. H. Scales' brewery and malt house at Shullsburg, Wis., which he will operate.

The Ybor City Brewing Co. has been organized at Tampa, Fla., to erect a brewery. The capital stock is $150,000.

C. A. Kraus of Pittsburg, Pa., has purchased and will operate the brewery at Erie, Pa., formerly operated by Anton Vogt.

The Chattanooga Brewing Co. of Chattanooga, Tenn., is making improvements in its plant and will increase the capacity.

A new brewery to cost $250,000 is to be built at Cleveland, Ohio, by a company headed by A. C. Buell of Niagara Falls.

Christian Hachemeister, manager for George Ringler & Co., brewers of New York City, died recently at the age of 61 years.

M. J. Griffin has retired from the firm operating the ale brewery at Watertown, N. Y., Barney & Welch succeeding to the business.

The brewing firm of Kuhl, Durrwachter & Co., Roslyn, Wash., has been dissolved, and E. J. Durrwachter will carry on the business.

E. C. Pagenstecher has organized a company at New Castle, Pa., and leased the Kirst Brewery. It is intended to erect a new brewery.

The Texas Brewing Co. of Fort Worth, Texas, is making extensive improvements to its plant, considerable new machinery being added.

The Eagle Brewing Co. of Watkins, N. Y., has handled about 200,000 bushels of barley this season, most of which was of Western growth.

It is reported that a large brewery will be established at Allegheny, Pa., by a company recently organized with a capital stock of $400,000.

Martin Blum's Franklin brewery at Galena, Ill., was destroyed by fire March 20. The origin of the fire is unknown. Loss $25,000; insurance $9,100.

It is said that a new brewery is to be erected at La Crosse, Wis., by a company at the head of which is Emil Kohn of the Onalaska Brewing Co., Onalaska, Wis.

Brewers in Germany are reported to have contracted for 2,500,000 bushels of barley from Montana next season. This barley will come from the Gallatin Valley, which lies along the Northern Pacific Railway about eighty miles east of Helena, where large crops of the finest quality are raised by irrigation.

William Gamble has leased the Hooker Tonic Co.'s plant at Batavia, N. Y., and when the improvements now being made are completed he will operate it as an ale and porter brewery.

William Grant of Marysville, manager for Balfour, Guthrie & Co., San Francisco, Cal., recently received from England ten tons of barley of the Smyrna variety for seeding near Gridley.

C. M. Warner's malt house at Clyde, N. Y., which contained 100,000 bushels of barley and malt, was damaged by fire March 24. The insurance on the building and contents is $50,000.

Joseph Wolf, brewer of Stillwater, Minn., has organized the Joseph Wolf Co., with a capital stock of $150,000, to erect a new brewery and engage in the brewing and distilling business.

The Germania Brewery, near Le Mars, Iowa, which had not been incorporated for some years, was burned recently. The loss, estimated at about $25,000, without insurance, falls on the Le Mars National Bank.

The liabilities of Miller & Kelly, maltsters of Weedsport, N. Y., who failed recently, are stated at $90,000, assets about $40,000. The firm had been in business for about 20 years, and until recent years were successful.

The Saloon Keepers' Brewing Co. has been organized at Chicago with a capital stock of $100,000. Plans have been prepared and contracts let for the erection of a brewery of 500,000 barrels' capacity at Chicago Heights.

A fire was recently discovered in the elevator of Brand's brewery at Chicago, but was extinguished without much damage being done. Incendiarism is suspected, as traces of kerosene were discovered near where the blaze started.

The suit of the Davenport Malt & Grain Co. vs. Edward M. McIntyre was recently brought to trial at Syracuse, N. Y. It is an action brought on a draft received Dec. 13, 1894, for $5,579.11. The draft was given for ninety days at 8 per cent., and was for malt which it is claimed was duly delivered. It is claimed by the plaintiff that there were no funds in the bank upon which the draft was made with which to pay it, and that it has never been paid. The answer of the defendant is that value was never received for the money for which the draft was given, and it is for that reason that it has never been paid.

A grain firm of Red Wing, Minn., which carried over a carload of barley of the crop of 1894 to the following season, had an experience in disposing of it which will no doubt be of interest to the many who are planning to carry over the barley crop of 1895. Inasmuch as the barley of 1894 was of vastly superior quality to that of last year, the firm naturally expected that it would be an easy matter to dispose of the carload. On the contrary they found it hard work to dispose of the quantity, even at a low price, being enabled to sell only when they found a maltster who was looking for some 1894 barley sufficient for one mess of malting. The reason given for a refusal of the barley in every case was that it would not sprout evenly with fresher barley, hence entailing much extra labor and even a considerable loss besides in handling.

BARLEY GRADES AT WINNIPEG.

Editor American Elevator and Grain Trade:—The rules regulating the inspection and grading of barley on this market are as follows:

No. 1 barley shall be plump, bright, sound, clean and free from other grain.

No. 2 barley shall be reasonably clean and sound, but not bright and plump enough to be graded as No. 1, and shall be reasonably free from other grain, and weigh not less than forty-eight pounds to the bushel.

No. 3 extra barley shall be in all respects the same as No. 2 barley except in color, weight not less than forty-seven pounds to the bushel.

No. 3 barley shall include shrunken or otherwise slightly damaged barley, weighing not less than forty-five pounds to the bushel.

No. 4 barley shall include all barley equal to No. 3, weighing less than forty-five pounds to the bushel.

All barley which is damp, musty, or from any

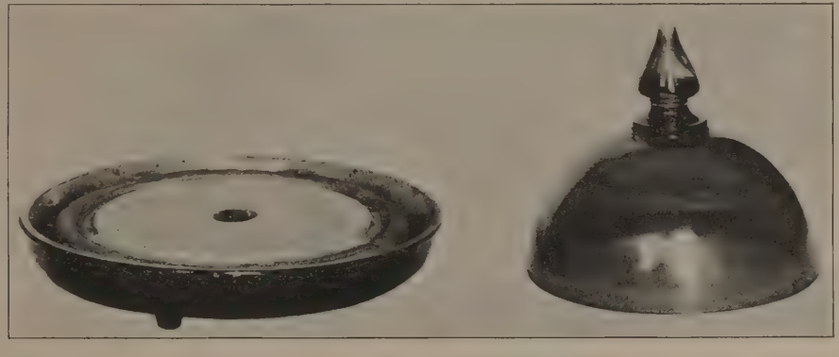
cause badly damaged or largely mixed with other grain, shall be graded as "rejected."

Yours faithfully, CHAS. N. BELL,
Secretary Grain and Produce Exchange.
Winnipeg, Manitoba.

APPARATUS FOR TESTING BARLEY GERMINATION.

The value of barley and seed grain depends upon the per cent. which will grow. Barley which will not grow is of no use to a maltster, in fact, it can be used for little else than feed. The percentage of barley which will germinate is an all important fact to the barley dealer and the maltster. Few barley buyers at country points pay any attention to the germination of barley, hence it is not surprising that they get stuck with old barley that will not grow. There is no necessity of their ignoring this property of barley as it is a very simple matter to determine exactly the per cent. of barley which will germinate. Having made a careful test for germination the information would be of great value to them in buying as well as selling.

Several years ago we gave a complete illustrated description of a home-made barley tester used very successfully by a prominent dealer on the Chicago market. It consists of two deep cake pans, made so that one will set within the other. The upper one has 10 rows of holes of 10 holes each punched in the bottom. These holes are just large enough to admit the end of a grain of barley. After grain were put in these 100 holes the pan is partially filled with damp



APPARATUS FOR TESTING BARLEY GERMINATION.

sand and water poured into the lower pan. The pan with holes was then set into the one containing water and in 48 hours the good barley will have sent its sprouts through the holes. By counting the grains which have sprouted the operator can quickly determine the per cent. of bad grains the sample contains.

The pans are very good, but we have recently learned of an apparatus for making the test which is even better. It was brought from Hungary by Ernst Hess of Chicago, who visited that country a few years ago, and it is said to be the most convenient apparatus for determining the per cent. of germination that has ever been designed. It does the work much quicker than the arrangement of pans and one feature which is greatly to its advantage is that it subjects the barley to the exact conditions ruling in malt houses when the barley is being sprouted.

As is shown by the illustration the apparatus consists of three pieces which set one upon the other when in use. The bottom dish is of glass seven-eighths of an inch deep and eight inches in diameter. A tube in the middle admits air from the bottom, the dish being supported on standards to permit the free circulation of air. In this dish is set a round cake of porous clay. It has a hole in the center to fit over the tube in the bottom of the dish, and has 100 depressions in its upper surface for placing 100 grains of barley or any other seeds of which it is desired to test the growing quality. An annular slot about the depressions is provided for the glass bell which covers the barley. An air hole is provided in the top of the glass cover.

The clay plate should be soaked in water about an hour before using. It should then be placed in the glass dish and one grain of the cereal to be tested put in each of the 100 depressions. The glass cover should then be put on and water poured into the dish so that it will be nearly up to the top of the clay plate. As this water is absorbed and evaporates more should be put in, but the plate should not be covered. The apparatus should then be placed in a warm room of about 68° to 72° Fahrenheit. It is said that in 36 hours the grain will be sprouted sufficiently to show what per cent. of it will grow and what per cent. is dead. The dead is of no use to a maltster, and he will not pay for it if he detects its presence. As germination is the principal thing taken into consideraton in determining the value of barley and of seed grain, every regular dealer can use a tester with profit and to great advantage.

SYSTEM OF BARLEY INSPECTION CAN BE IMPROVED.

Editor American Elevator and Grain Trade:—The rules for the inspection of barley in Minnesota have undergone no change since they were first adopted eleven years ago. Recommendations have occasionally been received urging the adoption of rules based upon the malting merits of the grain, in lieu of the present system of "commercial grades." There has, however, always arisen more or less conflict of opinion among members of the barley trade as to the advisability of such a departure. Some trading is done on the basis of our inspection, but a very large portion is in the line of trading by sample.

There has been but little agitation of the subject in our markets, as barley constitutes but a small portion of the grain receipts in Minnesota markets. All barley is inspected in our markets "on arrival." The area sown to barley in territory tributary to Minnesota markets is rapidly increasing and it promises to become an important feature of our work in the near future.

My personal opinion is that the system of inspection in vogue in most western markets could be improved. Just what should take its place, I am not prepared at present to suggest. The "germinating" test would undoubtedly be the most accurate, but would involve so much delay and consequent demurrage charges that it would appear to be impracticable. If a conference between the inspectors and those interested in the barley trade could be brought about, I have no doubt that a plan could be evolved which would be more adequate and satisfactory to all concerned than the present one, and which would approximate perfection sufficiently for all practical purposes.

Very truly yours, A. C. CLAUSEN,
Chief Inspector of Grain.
St. Paul, Minn.

The rules for grading barley in Minneapolis are as follows:

No. 1 Barley.—No. 1 barley shall be plump, bright, clean and free from other grain.

No. 2 Barley.—No. 2 barley shall be sound, of healthy color, not plump enough for No. 1, reasonably clean and reasonably free from other grain.

No. 3 Barley.—No. 3 barley shall include slightly shrunken and otherwise slightly damaged barley, not good enough for No. 2.

No. 4 Barley.—No. 4 barley shall include all barley fit for malting purposes, not good enough for No. 3.

No. 5 Barley.—No. 5 barley shall include all barley which is badly damaged or for any cause unfit for malting purposes, except that barley which has been chemically treated shall not be graded at all.

Scotch Barley.—Scotch barley, the grades Nos. 1, 2 and 3 Scotch barley shall correspond in all respects with the grades of Nos. 1, 2 and 3 barley, except that they shall be of the Scotch variety.

No Grade.—Barley that is in a heating condition too musty or too damp to be safe for warehousing, or that is bin burnt, badly damaged, exceedingly dirty or otherwise unfit for store, shall be classed as No Grade, with inspector's notations as to quality and condition.

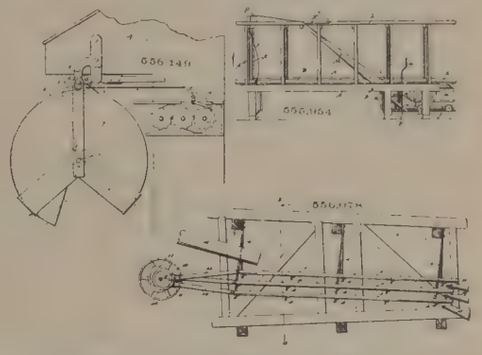
The word "new" shall be inserted in certificates of inspection of a newly harvested crop of barley until the first day of October.

Late Patents

Issued on March 10, 1896.

Combined Grain Dump and Elevator.—Justus Immel, Walnut, Ill. No. 555,954. Serial No. 572,291. Filed Dec. 16, 1895.

Baling Press.—Archibald Punteney, Kansas City, Mo. No. 555,970. Serial No. 563,957. Filed Sept. 28, 1895.



Apparatus for Making Scale Records and Certificates.—Melville F. Horine, Chicago, Ill. No. 556,009. Serial No. 571,691. Filed Dec. 10, 1895.

Separator.—Alfred R. Anthony, New York, N. Y. No. 556,078. Serial No. 536,158. Filed Jan. 24, 1895.

Gas Engine.—Harry G. Carnell, Dayton, Ohio. No. 556,086. Serial No. 553,662. Filed June 22, 1895.

Grain Drying Apparatus.—Louis E. Barbeau, London, England. No. 556,129. Serial No. 570,455. Filed Nov. 29, 1895.

Grain Weigher.—Edward Huber & Jacob W. Miller, Marion, Ohio. No. 556,149. Serial No. 560,566. Filed Aug. 26, 1895.

Gas or Vapor Engine.—Frederick W. Mellars, San Francisco, Cal. No. 556,195. Serial No. 543,080. Filed March 25, 1895.

Baling Press.—Andrew Wickey, Chicago, Ill. No. 556,233. Serial No. 551,986. Filed June 7, 1895.

Baling Press.—John W. Brown, and Albert A. Gehrt, Quincy, Ill., assignors to the Collins Plow Co., same place. No. 556,301. Serial No. 551,874. Filed June 6, 1895.

Vapor Engine.—Isaac F. Allman, Jersey City, N. J. No. 556,237. Serial No. 565,406. Filed Oct. 11, 1895.

Issued on March 17, 1896.

Baling Press.—Nels E. Swanson, Osceola, Neb. No. 556,482. Serial No. 527,887. Filed Nov. 5, 1894.

Horse Power.—Theodore F. Marquand, Florence, Ariz. No. 556,583. Serial No. 551,858. Filed June 6, 1895.

Issued on March 24, 1896.

Grain Car.—John Pearson, Chicago, Ill. No. 556,768. Serial No. 563,390. Filed Nov. 29, 1892. Renewed Sept. 23, 1895.

Governor for Gas or Gasoline Engines.—Sylvanus D. Shepperd, Newark, N. J., assignor to the Backus Water Motor Co., same place. No. 556,907. Serial No. 559,180. Filed Aug. 13, 1895.

Conveyor.—Jas. M. Dodge, Philadelphia, Pa., assignor to the Air Conveyor Co., same place and Camden, N. J. No. 557,058. Serial No. 569,093. Filed Nov. 15, 1895.

Conveyor.—Jas. M. Dodge, Philadelphia, Pa., assignor to the Air Conveyor Co., same place and Camden, N. J. No. 556,058. Serial No. 569,094. Filed Nov. 15, 1895.

Issued on March 31, 1896.

Gas Engine.—John F. Daly and Wm. L. Corson, San Francisco, Cal., assignors to the Union Gas Engine Co., same place. No. 557,493. Serial No. 526,943. Filed Oct. 25, 1894.

Thrashing and Clover Hulling and Dressing Machine.—John Greenslade, Christchurch, New Zealand. No. 557,266. Serial No. 561,798. Filed Sept. 7, 1895. Patented in England April 26, 1894, No. 8,330.

The lowest price for potatoes yet noted was at an auction sale in Seneca County, New York, where 200 bushels went for 3 cents per bushel.

MEETING OF THE ILLINOIS GRAIN DEALERS' ASSOCIATION.

At the call of President John Crocker, a meeting of the Illinois Grain Dealers' Association was held at Springfield, April 10. President Crocker called the meeting to order at 10:30 a. m. and referred briefly to a few of the causes which had made a meeting of the Association necessary. A great many complaints had arisen to which the constitution of the Association did not apply, and as a remedy it seemed necessary to amend it. The proper interpretation of the constitution was also an engrossing topic of interest.

The minutes of the previous meeting were read by Secretary B. S. Tyler, and were approved as read. The following applications for membership in the Association were read by the secretary:

P. B. & C. C. Miles, Peoria; Auburn Roller Mill Co., G. W. Hutton, secretary, Auburn; Devous & Rice, Ridgeway; Geo. Harney, Franklin; F. M. Cutler, Carthage; Hill Bros., Blue Mound; Tucker & Mosiman, Morton; F. M. Murphy, Stanford.

Mr. Maguire moved that the applications be accepted. Carried.

The following dealers had made application to the Executive Committee for membership since the last meeting of the association, and had been elected members: McLain Bros. & Co., Chicago; A. G. Munson & Sons, Wyckles; Norman H. Hawk, Chadwick; Brouslough & Bros., Somonauk; J. M. McCullough's Sons, Cincinnati, Ohio; Cloggett, Huffs & Co., Lexington; F. Holzman, Grant Park; Tohill Bros., Casner; F. Z. Ames, Rutland; E. S. McClure & Co., Farmer City; Fickle & Riley, West Ridge; M. E. Cook, Chicago; The Union Grain & Hay Co., Cincinnati, Ohio; Geo. Nicholson & Co., Henry; A. K. Knapp, Minooka; W. B. Probasco, Bloomington; M. R. Meuts, Ashland.

The Secretary stated for the information of members that a meeting of the Executive Committee of the Association had been held at his office in Decatur on November 2 to investigate the complaints which had been filed against Graham & Leeds, grain dealers of Illiopolis, Ill., and to decide whether they were regular dealers or not. It had been demanded that if they were not regular dealers then those who were buying of them should cease to do so. Mr. Costello, chairman of the Arbitration Committee, held a conference with one of the firm, after which he visited Mr. Ulrich in Springfield, with the object in view of coming to some decision in the matter. Mr. Costello said that his visit in Springfield had brought no results. He had seen Mr. Ulrich, but since that time nothing had been done. He thought that the point should be decided as to who were regular and who were not regular dealers. At the present time he deemed it difficult to decide this question. C. B. Congdon of Chicago asked for the reading of the constitution on the subject of the regular dealer. The Secretary read Art. II, Sec. I.

In continuance of the discussion of the firm of alleged irregular dealers Mr. Metcalf said that the subject was referred back to the committee, and it had written Mr. Tyler to the effect that it was not possible to admit that the firm was a regular dealer, yet buyers continued to transact business with it. President Crocker thought that the point at issue depended upon the definition of a regular dealer. It did not seem to him that the firm was not a regular dealer according to the constitution. He therefore thought that the constitution should be changed so that the meaning of the term regular dealer would meet all requirements.

C. S. Maguire asked if the executive committee had any resolution to offer. The President said that the Executive Committee had done nothing, but that the Arbitration Committee had attempted to straighten the matter out.

Thos. Costello said that the endeavor to define a regular dealer by designating him as one who owned an elevator should be carefully considered. There are a large number of buyers throughout the West who have no elevators and who are notwithstanding members of this Association, and are reputable dealers. He said in regard to the firm under discussion that he and Mr. Ulrich had come to the conclusion at their conference that the best way out of the difficulty was to endeavor to persuade the firm to join the Association. Mr. Maguire moved that an amendment of the constitution be referred to the Executive Committee, and the amendment be reported at the afternoon session. B. S. Tyler moved to amend the motion by referring the subject to a committee of five, who should report in the afternoon. The motion was carried as amended. Mr. Maguire moved that the committee also define the meaning of "regular buyer." Carried. The chair appointed on this committee Edwin Beggs, T. P. Baxter, E. S. Greenleaf, D. H. Winans and B. S. Tyler. C. S. Maguire moved that the meeting adjourn until 1:30 p. m. Carried.

AFTERNOON SESSION.

President Crocker called the meeting to order at 2 p. m. The Secretary read the following resolution:

We, the committee, appointed by the President, would submit the following:

Resolved, That it is the sense of this committee that a regular dealer is one who has facilities for handling, storing and selling grain at points where he may be buying grain regularly, either in person or by his representative, and any grain dealer who buys at any station, without such facilities and with irregularity, shall be deemed irregular at such station.

And we further reccommend that when local troubles arise in which members of this Association feel that they are aggrieved said members use all possible efforts to adjust their troubles before bringing the same before this Association.

Com. { EDWIN BEGGS, Chairman,
T. P. BAXTER,
E. S. GREENLEAF,
D. H. WINANS,
B. S. TYLER.

Mr. Pratt did not see any difference between the regular dealer as defined in the resolution and the dealer as defined formerly.

C. C. Miles: Even if the resolution was adopted it would not be explicit. At times a man who has no facilities may be a regular buyer. I can cite a case in which a buyer was purchasing grain at a station where there was no elevator. He had no need of an elevator and had really no facilities with the exception of a scale and bin.

Mr. Greenleaf: If the buyer had no facilities and the Association made no objection there was no harm done. In the case cited, however, the buyer really had facilities.

T. P. Baxter said the duty of the committee was not to make a bylaw, but to frame a definition. He read Art. II, Sec I, Art. XI, Sec. I, and Art. XII, Sec. IV of the constitution, and said that these three sections of the constitution covered the entire ground under discussion.

Thos. Costello asked of what the facilities of a grain dealer were supposed to consist. The President thought the term facilities should be defined and the definition be embraced in the resolution.

I. P. Rumsey thought that the report of the committee furnished a sufficient basis on which the Association could work, and moved that the resolution be adopted.

C. B. Congdon was of the opinion that the term "facilities" ought to be defined. He thought the committee ought to be able to understand the meaning of the by-law in question.

Secretary Tyler thought that facilities consisted of scales, office and cribs. The man in business, however, is the best judge of his requirements, or of what his facilities should consist. Facilities are the adjuncts necessary for the receiving, handling and storage of grain.

In response to a request as to what he thought the term "facilities" embraced, C. B. Congdon replied, "scales, office and cribs and a place for storage." That is, a dealer should be able to take care of all grain that comes to his station. L. G. Metcalf moved as an amendment that after the word "facilities" the following clause should be inserted: "Facilities, which shall be dumps, bins and storage capacity for handling all kinds of grain, or be recommended by a member of the Association at place of handling grain."

It was the opinion of G. W. Hutton that the definition should not be iron-clad, but should be as liberal as possible. All dealers did not handle grain in the same manner. Different localities made necessary different facilities.

Mr. Beggs moved the following as an amendment to the amendment: "That a regular dealer should have scale and office, and be recommended by a member of this Association within the county where he is handling grain, provided a member resides in that county."

F. M. Cutler thought the man should be deemed a regular dealer who remained continually as a buyer at one place, and he who was a transient buyer should not be considered a regular dealer. Edwin Beggs did not think that the buyer who came to a town and who put up scales and an office gave any certain indication that he was going to be a regular dealer. If the market went against him such a dealer might leave at any time.

Thos. Costello: If a buyer comes to a station with the intention of remaining there permanently he should be deemed regular. A man was regular only who bought continuously at one station. On motion the amendment to the amendment was lost. The amendment also was lost.

Mr. Maguire moved as an amendment that after the word facilities the clause "consisting of at least office and scales" should be inserted. Mr. Beggs moved as a substitute motion that all questions as to what constitutes an irregular dealer be referred to the Executive Committee.

Mr. Maguire hoped that the substitute motion would not pass. The question had been before the Executive Committee and the Arbitration Committee and remained unsettled. The meeting had been called with the special purpose of deciding this question, and he hoped that something definite would result, and that some action would be taken.

T. P. Baxter read Art. X, Sec. I of the constitution, and said that the question had been often before the Association, and had been changed to suit localities. The substitute motion meant nothing more than what was already incorporated in the by-laws. The Executive Committee ought not to be obliged to settle every small difficulty which arises. He did not think the substitute motion should prevail, but thought all dealers should know definitely who were and who were not regular dealers.

Mr. Beggs did not understand how the members could apply the laws to dealers outside of the Association. There ought to be some committee who should attend honestly and fairly to these questions as they arise from time to time. The substitute motion was lost. The amendment to the resolution was lost.

Mr. Costello moved as a substitute to the resolution that a committee of 3 be appointed whose duty it should be to investigate personally all complaints made by dealers, the expenses incurred to be paid by those making the complaint. This motion was lost and the original resolution was unanimously adopted.

I. P. Rumsey moved that dealers who have complaints to make before the Arbitration Committee should pay all expenses incurred in the investigation of such complaints. The motion was carried.

The Secretary read the following resolution:

Special attention is called and the members of this Association are asked to do what they can in connection with the repeal of the rule in the St. Louis market allowing No. 2 Hard Wheat to be the speculative grade. As the members of the Merchants' Exchange of that city will vote on this rule on April 13, and furthermore, as St. Louis has been known all over the world as one of the best winter wheat markets,

Resolved, That we, the grain dealers of Illinois, being extensive handlers of winter wheat, believe that St. Louis should return to the standard of No. 2 Red Winter Wheat and that the present rule should be abrogated.

The resolution was adopted. Mr. Newbegin addressed the Association on recent troubles with railroads and the question of shortages. He referred to a claim of Secretary Tyler against the Wabash railroad, and moved that the Association furnish the funds to force the railroad to a settlement. If the Association won the suit a precedent would be established whereby other dealers could expect to be benefited. The complaint was a particularly just one and the complainant not being situated upon the railroad could push the claim without fear of being harassed by the railroad company.

Mr. Tyler stated that the claim was based on a shortage of grain, the amount of the shortage being the difference between the Decatur Union Elevator weights and Chicago weights and involved five cars on which there was a shortage of about 200 bushels.

I. P. Rumsey thought the question an important

one, and one which the Association should carry through to the end. C. S. Maguire moved that the question be given to the Executive Committee with power to act. The motion was carried.

T. P. Baxter referred to the question of the regular dealer and thought that less attention would be given to this subject if the Arbitration Committee would be more active in the performance of their duties. He did not find that this committee had exerted itself to any great extent. He thought they should do more than they had formerly done and that they should go promptly to whatever point their services were required.

E. R. Ulrich Jr. offered the following resolution:

Whereas, The grain shippers of the United States are subject to heavy losses by reason of shortage, shrinkage in weights and stealage on grain they entrust for shipment in bulk by the various railroad companies over which such shipments are forwarded to various markets, and,

Whereas, The said railroad companies almost universally ignore these shortage claims, many of which could be obviated if proper facilities were furnished and proper care taken in shipping, transferring and delivering said grain to its destination, and,

Whereas, If this special hazard in the grain trade was done away with the dealer would be able to pay to the producer an equivalent amount more than when he, the dealer, has to stand in the breach, therefore,

Be it Resolved, That we, the members of the Illinois Grain Dealers' Association, do hereby petition our respective members of the Senate and House of Representatives at Washington to have an amendment made to the Interstate Commerce Act of February 4, 1887, making it to read and to embody that part of the Illinois Railroad and Warehouse Commissioners law relating to the receiving and carrying grain and containing section No. 2562, which refers to the railroad companies' liability in case of shortages, and which reads as follows:

"2562—RECEIVE AND CARRY GRAIN WITHOUT DISTINCTION.

"1. Be it enacted by the People of the State of Illinois, represented in the General Assemby, That every railroad corporation, chartered by or organized under the laws of this state or doing business within the limits of the same, when desired by any person wishing to ship any grain over its road, shall receive and transport such grain in bulk, within a reasonable time, and load the same either upon its track, at its depot or in any warehouse adjoining its track or sidetrack, without distinction, discrimination or favor between one shipper and another, and without distinction and discrimination as to the manner in which such grain is offered to it for transportation, or as to the person, warehouse or place to whom or to which it may be consigned.

"Weighing In—Receipt. And at the time such grain is received by it for transportation, such corporation shall carefully and correctly weigh the same, and issue to the shipper thereof a receipt or bill of lading for such grain, in which shall be stated the true and correct weight.

"Weighing Out—Shrinkage. And such corporation shall weigh out and deliver to such shipper, his consignee or other person entitled to receive the same, at the place of delivery, the full amount of such grain, without any deduction for leakage, shrinkage or other loss in the quantity of the same.

"Damages.—In default of such delivery, the corporation so failing to deliver the full amount of such grain shall pay to the person entitled thereto the full market value of any such grain not delivered at the time and place when and where the same should have been delivered.

"Evidence—Shortage.—If any such corporation shall, upon the receipt by it of any grain for transportation, neglect or refuse to weigh and receipt for the same, as aforesaid, the sworn statement of the shipper or his agent having personal knowledge of the amount of grain so shipped, shall be taken as true, as to the amount so shipped; and in case of the neglect or refusal of any such corporation, upon the delivery by them of any grain, to weigh the same, as aforesaid, the sworn statement of the person to whom the same was delivered or his agent having personal knowledge of the weight thereof shall be taken as true, as to the amount delivered. And if, by such statements, it shall appear that such corporation has failed to deliver the amount so shown to be shipped, such corporation shall be liable for the shortage, and shall pay to the person entitled thereto the full market value of such shortage, as the time and place when and where the same should have been delivered."

And therefore

Be it Resolved, That we, the members of this Association, do all in our power to influence the various grain receiving and grain shipping associations throughout the United States to take up this same matter and do their very best to have said laws so amended.

The resolution was adopted. C. S. Maguire spoke of the bill now pending before the Ohio State Legislature which provides for the legalization of car service, which question has heretofore been in doubt. The bill also provides for the payment to the consignor of $1 per day, per car, for every day's detention of cars in transit. Mr. Maguire said also that no Cincinnati dealer, last year, had violated the rule forbidding the dealer to transact business with the farmer.

I. P. Rumsey moved that the Secretary be instructed to forward a copy of the resolution to the proper authorities, and that it be brought before Congress. The motion was carried. T. P. Baxter moved that a vote of thanks be extended to the proper persons for the use of the hall during the session of the Association.

The meeting then adjourned.

Trade Notes

There was a little man,
And he had some little wants,
And he carried them quite safely in his head;
He didn't advertise,
And it caused him much surprise,
When the coroner informed him he was dead!

"A full house"—The business place of a judicious advertiser.

Charles Near, formerly of the Knickerbocker Co. of Jackson, Mich., is now representing the S. Howes Co. of Silver Creek, N. Y., at Indianapolis, Ind.

L. V. Thistle has been appointed Southwestern representative of the S. Howes Co. of Silver Creek, N. Y. His headquarters are at St. Louis, Mo.

A man who advertises is by far the most liberal to deal with. He is willing to live and let live. He doesn't squeeze the dollar until the eagle screams. He doesn't want the earth.

The New Era Iron Works Co. of Dayton, Ohio, issues an illustrated catalogue of its New Era Engines for gas and gasoline which gives information regarding the use of gas engines that power users will find of value.

The Macdonald Engineering Co., elevator builder of Chicago, announces that it has removed from the Medinah Building into new and spacious quarters in the Monadnock Block, Rooms 1454, 1455 and 1456, where it will be pleased to see its friends.

The Jeffrey Mfg. Co. of Columbus, Ohio, has issued an illustrated catalogue of its labor-saving appliances, chain belting, elevators, conveyors and power transmission machinery. Many of the illustrations are of plants equipped with Jeffrey machinery.

E. F. Wallace of Harrisburg, Pa., who has been traveling salesman for the past 20 years, is now representing the S. Howes Co. of Silver Creek, N. Y. He has severed his connection with the Richmond Mfg. Co., with whom he had been for ten years.

The Johnson & Field Co. of Racine, Wis., has commenced the manufacture of bicycles in connection with its Dustless Separators and general elevator and mill supplies. The company reports a good business since the first of the year and a promising outlook for business.

A. B. Colton, the well-known machinery man, has taken the management of the Kansas City house of the Great Western Mfg. Co. of Leavenworth, Kan. Mr. Colton has for a number of years covered territory tributary to Kansas City in the line of elevator and mill machinery.

The B. S. Constant Co. of Bloomington, Ill., writes us that it has made some improvements on the Constant Elevator Feeder, so that it will bring the grain from one to five dumps direct to one stand of elevators independent of each other, and all driven from the boot pulley shaft.

The Charter Gas Engine Co. of Sterling, Ill., writes us as follows: "Business is better than it was last year, which is saying a good deal, and the prospects are even more flattering than usual." In one day recently the company received eight orders for engines going into six different states.

The S. Howes Co. of Silver Creek, N. Y., writes us that it is having a phenomenal trade for this season of the year. In the company's works are now 115 men working ten hours per day, 20 more than were ever before employed at this season of the year. The company reports very good inquiries the last few weeks, and that according to reports of its representatives in different sections of the country the outlook is exceedingly bright.

Brazil, Uruguay and the Argentine Republic have extended invitations through the State Department to the chambers of commerce and other trade organizations in the United States to visit those countries this year for the purpose of becoming familiar with their resources, with a view of increasing trade relations with the United States. The invitations will probably be extended to chambers of commerce of Philadelphia, New York, Boston, Baltimore, Chicago, St. Louis, Cincinnati and New Orleans, and whatever others may express a desire to join in the movement. The stay in South America will be about three months, and it is suggested that June, July and August would be the best time to go.

The Foos Gas and Gasoline Engine Co. of Springfield, Ohio, reports numerous sales of its engines, and numerous inquiries from all parts of the country. The 100-horse power gas engine which the company started at the East Street shops ten months ago has proved a perfect engine in every respect, and is giving satisfaction.

It is said that the government of Mexico has not indorsed the plan for the establishment at the City of Mexico of an Industrial Exposition, the purpose of which would be the promotion of trade relations with the United States and Spanish-American countries. It was announced that the exposition was to open next September.

The H. Channon Co. of 24-26 Market street, Chicago, are publishing a book on rope transmission, a copy of which will be sent to engineers and others interested, who send their name and address. The book is said to have been prepared by an expert in that line and to contain many points on rope transmission of power which will be of special value.

Warren & Co., commission merchants of Peoria, Ill., report that they transacted a very large business during 1895, and that indications point to an increase this year. The firm has been in existence over 20 years, and careful attention given to business consigned to it has won a large number of patrons throughout the Western and Northwestern states.

The attention of receivers and shippers of hay is called to the advertisement of M. Dunebarger, Fayette, Ohio, elsewhere in this issue. Mr. Dunebarger is an accountant of long experience, who has seen the necessity of getting out a Hay and Grain Record Book, and judging from a sample page submitted to us, his book will be of value to both shipper and receiver.

The firm of A. A. Johnson & Co., grain and flour commission merchants of Baltimore, Md., was dissolved March 1 on account of the death of A. A. Johnson. Wm. C. Baum, late of that firm, announces that he has made an arrangement with Lederer Bros. by which the business lately conducted by A. A. Johnson and himself will be carried on by that firm. Lederer Bros., with whom Mr. Baum is now connected, have had 17 years' experience in the business, and have a recognized high standing in the trade.

The Todds & Stanley Mill Furnishing Co. of St. Louis, Mo., is preparing to erect new works in East St. Louis, Ill. A new shop, 70x260 feet, will be erected. It will be a one-story structure, with runway in the center for a 25-foot span traveling crane. Fronting the shop will be a two-story office building containing a drawing office, 25x60 feet, and adjacent buildings will be provided for power house, pattern storage and warehouse. The company's business has been so good that the works are running 18 hours a day. A large amount of elevator and mill machinery was recently sold to go to Australia.

W. J. Clark & Co. of Salem, Ohio, the well-known manufacturers of the Salem Elevator Buckets, have rebuilt and re-equipped their works which were destroyed by fire last September. The new plant is one of the largest in the country for that particular line of business, and is equipped with the best machinery which the long experience of that firm has enabled them to devise for making their several specialties. The Salem Elevator Bucket, which is so well and favorably known among grain elevator men, millers and mine operators, is the chief article of manufacture at this establishment, but the firm also makes a large line of heavy sheet and plate metal work for which they are said to have exceptionally good facilities.

The southwest grain Congress at Charleston April 29 is exciting great interest. It is in the line of previous conventions, and the object is to increase the commerce of Southern Atlantic ports. That is what will surely occur so long as New York and Buffalo impose present terminal charges on western products.—Toledo Market Report.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., APRIL 15, 1896.

Lost near Cincinnati, the undisputed right to exact money from receivers and shippers for delaying cars. Finder will please return to any of the trunk lines and receive reward. No questions asked.

The government figures as to the per capita consumption of wheat in this country vary from 3.40 bushels to 6.77 bushels with different years. It is impossible that in a country like this the variation should be so great in fact.

Some curious combinations are evolved by the spreader in his efforts to beat both ends of a game. The latest is by a Northwestern operator who has been buying barley and selling oats and flax against it. This takes the ribbon for originality.

The grain shipper pays for delaying the cars of carriers at the rate of $2 a day, but the carrier never pays a cent for delay unless sued for it, although the market price of the shipper's grain may have declined several cents a cental during the delay.

It seems almost incredible that anyone with large business interests should keep no bank account. Yet this was true of Rosencranz, the recently deceased member of the Chicago Board. He always settled in currency and insisted on others settling with him the same way.

Country elevator men who clean seed grain for their farmer patrons at cost find that it makes them many friends and reduces the amount of foreign seeds in the resulting crop as well as increases the yield. A large yield of superior grain in any district will bring prosperity to the dealer as well as the producer, and especially so if the crops of other districts are of inferior quality.

A proposition before the Chicago Board of Trade is to make the hours of trading from 9:30 a. m. to 2 p. m., giving a session of four and a half hours, instead of three and three-quarters, as at present. One purpose is to lessen the curb trading, and another is to have the Board open until the close of the New York Stock Exchange.

A correspondent writes us from Orange county, New York, that "The consumption of oats in this territory is 50 per cent. greater than a year ago. Were I a speculator I would buy oats for future delivery." The consumption is also large in many other territories, but the supply is also large and oats come forward freely at the prevailing low prices.

It is a pleasure to handle grain of superior quality and any shipper who will go to the trouble to induce the farmer to change his seed every three or four years will profit by the results in more ways than one. The farmer will feel indebted to the shipper and the shipper will have a firmer hold on the farmer's patronage. Shipping in good seed and selling it to the farmers at a fair price removes them from the list of possible gulls for the Bohemian oats swindler and others of his kin.

As is shown by a communication in this number, the grain dealers at Manson, Iowa, have been suffering from rank discrimination by the only road over which they can ship, and after protesting and petitioning in vain, they decided to close their elevators. This is truly a rather unique course to take. The shippers could at the same time file a complaint with the Interstate Commerce Commission. A formal complaint would soon bring about an investigation and result in an equitable readjustment of the rates.

A writer in the Nineteenth Century advocates the issue, by Great Britain, of $150,000,000 in bonds for the purchase and maintenance of a store of grain equal to a full year's food supply of the United Kingdom in case of war and blockade. Should such a project be carried out, England would be by far the greatest factor in the world's wheat market as this enormous supply of wheat would need constant renewal and so necessitate buying and selling on an enormous scale. But England is more likely to spend the money on warships than on warehouses. And possibly that is the better policy.

Grain shippers have long desired a uniform bill of lading and uniform classification of freight by all carriers and some of their recent experiences have caused them to wish very much for uniform sized freight cars.. At present the large and the small cars frequently cause some very sore disappointments to shippers as well as receivers. If carriers would do away with their minimum weight regulations it would be easier to carry on the grain business with cars of varying sizes. The trade could then designate what shall constitute a carload without any interference from the carriers. Shippers would not find it necessary to load cars to the roof in order to get the carload rate.

THE IRREGULAR DEALER.

The irregular grain dealer has long been the cause of much trouble and anxiety to the regular dealer. Not only has he been irregular in his methods of doing business, but also irregular in his place of business. Appearing only when the grain was being rushed to market he has attempted to secure a large part of the regular dealer's business without going to the expense of maintaining a place of business throughout the year. His freedom to move about from place to place and conduct his business wherever he chooses relieves him of all restrictions and he practices many tricks upon the gullible farmer that a regular dealer would not dare attempt to try, even were he so disposed. His trickery always brings discredit upon the entire trade with the farmer and his acquaintances.

The regular dealer is regular in his place of business and in his methods of conducting the business. He carries on his business at a certain place or places regularly every day of the year, and with the expectation of continuing to do so. He conducts his business honestly and aboveboard and does not bring discredit upon the trade. Many regular dealers have no wagon scales because they do not need them, or feel the necessity of reweighing grain which has been weighed by the city weighman. Neither is the regular dealer necessarily one who operates an elevator. It would seem right that when a man has bought and shipped grain at a place continuously for one year and signified his intention of continuing to buy grain there, he should be considered a regular dealer and classed with dealers who have conducted a business regularly for a longer time. His classification should not depend upon his possessions, but rather upon the regularity with which he conducts the business.

IMPORTANT RAILROAD DECISIONS.

The Supreme Court of the United States has handed down a number of decisions having a bearing upon the Interstate Commerce law in various aspects. The first and possibly the most important of these is the Brown case. Brown was auditor of the Allegheny Valley Railroad, which was charged with discriminating in favor of a certain coal company. He was summoned as a witness and asked whether he knew of any such discrimination. He declined to testify on the ground that his testimony might incriminate himself. He thus shielded himself under the prerogative supposed to be accorded to the citizen in Section 860 of the United States Revised Statues, and in the Constitution itself. But the court holds that the act of Congress of February 11, 1893, which enacts that no person shall be prosecuted or subjected to penalty on account of anything which he may testify when compelled to do so by the Interstate Commerce commission, keeps within the Constitution, since it expressly provides immunity for the witnesses compelled to testify. This puts a weapon in the hand of the commission which it has lacked since the Counselman case was decided; and it is said that the first fruits of this decision is that the commission will start after some big shipper and make an example of him.

Another case decided was the "Import Rate Case," which was that of the Texas Pacific Rail-

way Co. vs. the Interstate Commerce Commission, appealed from the Circuit Court of Appeals for the second circuit. The Circuit Court held that it was illegal to charge less on imported goods than on domestic articles, as this was discrimination against the home article. This view was the view of the commission as well as the court. The plea of the railroad was that it had to accept imports at the joint ocean and rail rate or lose the business altogether. It admitted that this rate was less than its rate for carrying domestic freight. The Supreme Court ruled in the railroad's favor, reversing the decision of the lower court and the commission.

Another important case was that known as the "Social Circle Case," involving the long and short haul clause. This case grew out of the action of the commission in disposing of a case in which a Cincinnati manufacturer complained that the Cincinnati Southern, Western Atlantic and Georgia Railroad companies charged the same rate for transporting buggies from Cincinnati to Augusta, Ga., a distance of 645 miles, as from Cincinnati to Atlanta, a distance of 474 miles, and 30 cents more a hundred to Social Circle, Ga., between Atlanta and Augusta, than to either of these two points. This was apparently a clear violation of the long and short haul clause. The defense set up was that the additional charge of 30 cents per hundred was the local charge of the Georgia company, and therefore the case did not come within the provisions of the Interstate Commerce Act. The Supreme Court sustained the commission, and held that by receiving the goods on foreign through bills of lading, the Georgia railroad became a part of a continuous line for the continuous carriage of freight.

WILL SUE FOR OVERCHARGES.

The Grain Shippers' Association of Northwest Iowa, which has been so remarkably successful in suing rail carriers for rebates of overcharges, is about to commence a number of new suits. Several years ago the Interstate Commerce Commission ordered the railroads crossing Iowa to make a rate on coarse grain from Missouri River points to Chicago of 17 cents per 100 pounds and 20 cents per 100 on wheat. The railroad companies heeded the order and reduced the rate, but did not maintain the rate ordered. By degrees they have raised the rates until some of the shippers at interior points are required to pay rates out of all proportion to the rates ordered.

Naturally the shippers are somewhat spunky at this unjust treatment and after protesting in vain against the unlawful extortion they propose to sue for the money that has been exacted from them. Roads which have charged a rate in excess of 17 cents on coarse grain to Chicago and common points and 20 cents on wheat will be required to show reason why they should not return the amount of the overcharge. If the shipments were billed through the amount of the overcharge is whatever they charged in excess of 12 cents on coarse grain to the East bank of the Mississippi River and 14 cents on wheat. A number of shippers have recently joined the association for the purpose of having their claims for overcharges included in the suits, and others no doubt will fall in line and help secure repayment of overcharges and the reëstablishment of equitable rates. No shipper of that district who wants fair rates can afford to refuse to join in this fight.

AGAIN AFTER RAILROADS FOR DISCRIMINATION.

A number of officers and employes of trunk lines have recently been indicted for granting discriminating rates to Chicago shippers of grain and other freight and the prospects for their conviction seems good. The recent decisions of the Supreme Court have in a measure unfettered the Interstate Commerce Commission and it is going about its work with renewed energy. Its regained hope of accomplishing something along the line of reducing the existing discriminations against persons, places and industries has prompted it to commence new work with a vigorous determination to win.

Shippers who are suffering from discrimination should make haste to file a formal complaint with the commission. Conditions have been changed and it may be that the commission can now be of help to a shipper, although it previously refused to attempt it.

HEAVY CHARGES LEVIED ON EXPORT GRAIN.

New York grain receivers have spent much time recently resolving and protesting and working against the differentials granted Philadelphia, Baltimore and South Atlantic ports. Considerable export grain has been going via Gulf ports during the past winter and this has also helped to reduce the export grain trade of New York, so it is not at all surprising that they are somewhat anxious about the future of their business, and well they may be, for unless the extortionate charges levied upon grain going via Buffalo and New York are greatly reduced the export grain is certain to seek other and less expensive channels. The routing of grain is not dictated by sentiment, but by cost.

New York's present trouble is at home, and lies in the cost of handling grain in that port, which is much larger than in any other seaport which has facilities for handling export grain. Twenty cents on grain Chicago to New York. may be extortionate when one takes into consideration the actual cost of transporting it, still it is much less than rail carriers get in any other part of the country for transporting grain 1,000 miles.

The elevator men at Buffalo and New York have always held up grain shippers for all they could possibly squeeze out of them, and this robbery has diverted much grain to other routes. Beaten in the legislature and then in the courts, the elevator men got around the law regulating the charge for transferring grain by refusing to receive grain for transfer. In all published statements regarding elevating and storage rates they state "no grain will be received for transfer." The only way a shipper can get his grain transferred at these points is to pay for receiving and discharging $\frac{5}{8}$ of a cent and $\frac{1}{4}$ cent for first 10 days storage, which amounts to $\frac{3}{4}$ of a cent for transferring. The cost of transferring the grain is not over 1-10 of a cent.

In view of this extortion which is practiced in New York state, it seems decidedly short-sighted on the part of the Produce Exchange to send a committee to Albany to oppose the appropriation of money to provide state floating transfer elevators at Buffalo and New York. The establishment of such elevators might improve the transferring facilities and reduce the cost. A bill declaring all elevators handling the grain of different owners shall be public elevators and shall transfer grain at the rate prescribed by law ($\frac{1}{4}$ of cent) would secure the desired result without expense to the state.

GRAIN DEALERS ORGANIZING.

Although Iowa grain dealers had two associations, the dealers of the Southwestern part of the state last month joined with the Missouri dealers in organizing what will be known as the Grain Dealers' Association of Southwestern Iowa and Northwestern Missouri. The association already has a membership of nearly 100 regular shippers and the prospects are bright for double this number before the next meeting, which will be held the latter part of this month. This is truly encouraging and is sufficient to give any doubting Thomas renewed faith in the ability of the country dealers to combine for the advancement of mutual interests.

This association is meeting with such unusual favor at the hands of the country shippers that it may prove only the nucleus of an interstate league or of a national association. It will work along the same line as the Illinois Grain Dealers' Association and will seek to discourage receivers in sending track bids to irregular shippers. The association evidently has the right kind of men at its head. They have several much-needed reforms in view and know how to go about the work of securing them.

The bill providing for the legalizing of the metric system of weights and measures has been sent back to the Committee on Weights and Measures. It came near being passed by the House, but failed and was recommitted. The bill is likely to be defeated unless its friends rally.

There is more trouble in store for grain shippers, which is brought about by the increasing variation in the size of grain cars. The Joint Traffic Association has decided that all members must require shippers on their lines to load cars to within 10 per cent. of the marked capacity, and that in no instance shall the minimum weight be less than 24,000 pounds. How shippers will always succeed in loading cars with oats to within 10 per cent. of their marked capacity is a puzzle the managers should solve before asking the shippers to do it.

The Manitoba legislature passed a resolution the other day to the effect that the "elevator monopoly" existing throughout the province should be removed as being detrimental to the interests of the people generally. The resolution is aimed at the refusal of the railways to allow the loading of wheat directly upon cars at points where elevators have been established. The railroads simply discriminate in favor of rapidity and the minimum of trouble to themselves. Incidentally, they discriminate in favor of the elevator which is a permanent fixture of the town, and a steady feeder of the railroad. If that is "monopoly" it is of a very mild type, and one which finds a very considerable amount of justification with reasonable people.

EDITORIAL MENTION

Send us a crop report on the 10th of each month.

Wanted and needed—a national organization of grain dealers.

Bill anti-option has died again and the mourners are fewer than usual.

When will the National Association of Grain Dealers hold its first meeting? Where?

Will railroad officials heed the provisions of the Interstate Commerce Law or go to jail?

The crop liars have not killed the corn crop yet, but they promise to give it their earnest attention soon.

You can get a copy of Davis Grain Tables and the AMERICAN ELEVATOR AND GRAIN TRADE for one year for $1.50.

Delays of grain at initial points are as expensive to the shipper as delays in transit and should be paid for accordingly.

Well coopered cars do not always leak, but some of the shipments of oats have been leaking badly when they arrived in Chicago.

Organization seems to be contagious among the grain receivers and retailers at terminals, but the country shippers are still apathetic.

The Buffalo elevator pool will continue to illegally exact money from dealers shipping grain via that port as long as they will submit to it.

Ohio is threatened with a new iron-clad law against treating, but this will not interfere with grain dealers who desire to treat grain for smut.

Michigan grain shippers seem to be satisfied that the farmers are not sincere in their effort to force state inspection upon the grain trade of every country market.

The Indiana grain dealers are not organizing as any shrewd traffic manager would suppose they would do. They seem to enjoy the impositions heaped upon them.

The St. Louis Merchant's Exchange has repealed the rule making No. 2 Hard Winter Wheat deliverable on contracts. The change will take effect August 1.

The grain shipper dreamed that he had been granted a clean bill of lading and died of joy. The next day the coroner's jury brought in a verdict of death from heart failure.

Secretary Miller of the Ohio State Board of Agriculture complains that the forgeries of crop bulletins from that state continues. Although no bulletin was issued for March, a forged one nevertheless appeared and was circulated in Chicago and other grain centers. Another forged one appeared for April a week in advance of the official bulletin.

Iowa grain dealers seem to have the organization fever. With three active associations, the dealers of that state are well enough organized to lead the way for a national organization.

There are an unusual number of grain speculators who have lately sought relief from the result of their own speculations. It is a baby act that has long since ceased to win, to plead that the transactions were gambling deals.

The South and West Grain and Trade Congress will hold its third annual meeting at Charleston, S. C., April 29. The purpose is to advance the trade between the West and South and divert the export trade to Southern ports.

The town or city which attempts to compel grain dealers to go out of their way to have all grain bought of farmers weighed on the city scales is placing a tremendous strain on justice, and one which would hardly be sustained by the courts.

Some of the proprietors of large storage elevators who let the contracts for erecting their houses to the lowest bidder are regretting they did not offer to pay a fair price and thereby get a good house. A cheap elevator only can be secured for a cheap price.

The Treasury Department has refused to give Superior millers a rebate of any part of the duty paid on Manitoba wheat imported and mixed with American wheat and then exported in the form of flour. This will block the way to large imports of Canadian wheat which were contemplated.

Some New York grain dealers are making a frantic kick against Baltimore's differential of 3 cents on grain, in fact, they have been so completely wrapped up in the consideration of this differential that they have failed to notice the extortion practiced by those who transfer grain at Buffalo and New York.

The country grain dealers have arrived at the fork in the road where one road leads to Success, via Organization, and the other to Failure, via Toleration. If they will organize they may be able to obtain relief from some of the impositions heaped upon them. To continue to tolerate the abuses is to court disaster.

The government crop report indicates a yield of 268,000,000 bushels of winter wheat, regarding 15.7 bushels per acre as par. This is of course assuming the acreage of 23,647,000, as shown by the December report, which should be decreased somewhat by the same influences that have decreased the condition.

Cincinnati receivers are still working for the reciprocal demurrage charge and have finally secured the active assistance of the Chamber of Commerce. A bill has been introduced in the Assembly of the State Legislature to promote diligence in loading, unloading and switching freight cars. If the bill does not also provide that carriers shall promptly forward all freight received for shipment it falls far short of the mark required by the trade. The greatest delays of grain have been at initial points and in transit.

The Chicago Sugar Refinery, which may never have been accused of reporting short weights, is said to be doing all its own weighing. It seems that the receivers who fought so persistently and obstinately for official weights have forgotten all their determined vows against elevator men and buyers who would not give official weights.

The Illinois Central Railroad Co. has at last decided to recognize the importance of New Orleans export grain trade and will immediately commence the erection of a modern 1,000,000 bushel elevator at that port. When the elevator has been completed it will not be necessary to keep so much of the grain in cars on the side track for four to six weeks.

The Grain Inspection Department of Missouri is out of debt, but it is still charging the trade 75 cents a car for its grading. The receivers of St. Louis have long been convinced that the department exacted too much for its service and now that they are organized it might prove profitable for them to undertake the work of securing a reduction. Country shippers would surely appreciate a reduction to a reasonable figure.

The oat cleaners have enough mustard seed to supply the world for the rest of the century. Many cars of oats arriving in Chicago have from 500 to 1,000 pounds of mustard and other seeds and some of them contain even more. Oats are arriving in an unusually dirty condition this year. They are so cheap that country shippers probably think they cannot afford to clean them. If they will consider the freight on the dirt alone they will find that they would secure a fair profit by removing the seed and grinding it for feed.

It is not every poorly constructed elevator which spreads or falls, but this is often due to the light loads they are given to carry. Most any country barn builder can erect an elevator so it will stand alone, but when it comes to carrying a heavy load and providing for the lateral and other strains to which it is subjected, he is in the dark. Any elevator man who will peruse the articles now being published in this journal on the "Construction of Granaries," will get some idea of a few of the complicated problems which must be taken into consideration when building a good elevator.

Will the grain elevator of the coming century be fireproof? This question is receiving more attention than ever before in this country, probably on account of the recent fire. In Europe most of the elevators where grain is stored in bins are fireproof and, as was shown by our St. Petersburg correspondent, all of them, like the Russian elevators, are operated at a loss. The storage elevators can be built much better and the fire risk greatly reduced, as has been done in several notable instances in Chicago, without greatly increasing the cost. The improved facilities for disposing of the refuse matter and keeping the elevators clean, together with improved facilities

for extinguishing fires, go far toward reducing the fire risk to a minimum.

The warehouse bill which was introduced in the Iowa Legislature early in the session was defeated on the first vote in the Assembly, then reconsidered and passed. It was sent to the Senate, but in the rush preceding adjournment it failed to receive consideration, so the grain dealers of the state have nothing farther to fear from this bugaboo for two years at least. It might save some trouble by making it a point to see that the author of the bill is retained at home when the time comes to select representatives to the next legislature.

If there was a shortage in the amount of cash remitted by a shipper for transporting his grain, the carrier's agents would raise a terrible kick, and if the shipper should explain that it leaked out of his pocket while transporting it, the agents would swear until they were black in the face. When a shortage is reported in a shipment of grain entrusted to their care, they are effected quite differently and coldly disdain to bother with such trifles, or with supreme suavity promise to look up the matter hereafter. As most shippers know they generally go to the Hereafter without having done so.

The Iowa State Register, in its customary mild and measured language, declares that the boards of trade "have cost the world more than all of its wars in money, sorrow and suffering," and wants them obliterated from the face of the earth and the Iowa legislature to pass a "public warehouse law to enable the farmers and people to gain and retain the legitimate profits on the grain of the state seeking the markets of the world." The editor is evidently in earnest, even if his hyperbole is a little too strong; but we fail to see how a warehouse law is going to help "obliterate" the boards of trade.

Milwaukee millers have formed a compact by which they expect to get all the No. 1 Northern and No. 2 Northern for less than they have been paying. Each will be free to buy the other grades, as he desires, but all of the grades designated will be bought by two representatives of the millers and then apportioned among the different mills. The prices which will be paid for these grades will be fixed by a committee of the millers each morning. If the millers do not show a disposition to pay a fair price for these grades and the shippers learn of the compact, Milwaukee will soon receive nothing but low grade wheat.

"The "spark" question, the loss caused by the sparks of locomotives, has set the railroads and insurance companies by the ears in Massachusetts. The old plan was for the insurance company to pay a loss, subrogate under the policy, and then collect from the railroad company—if they could. Last year the railroads stole a march on the insurance companies and got a bill passed giving railroads the privilege of paying the property owner and subrogating under the policy and recovering from the insurance companies—if they could. We are glad to see the railroads and insurance companies fighting for the privilege of paying losses on grain elevators, flour mills, etc.

MEXICAN JUNE CORN.

J. M. Vance writes the San Antonio, Texas, Stockman in answer to a query in regard to Mexican June corn:

"What is known as 'June corn' has been used for years in Mexico. On irrigated land they raise two crops a year of this corn, for it can be planted any time from March until August, and with irrigation, or with one good rain, it will produce a crop. This corn, if planted early and with much rain, is liable to grow all to stalk and not produce much grain. Last year I planted in April and had stalks over 17 feet high, and some stalks from two to three ears each. It yielded about 40 bushels per acre. Planted late this corn makes fine green feed for milch cows, for it remains green late in August, long after everything else is dry. I should judge that it would be fine for ensilage, for it produces such a large quantity of forage to the acre. Plant and cultivate the same as any other corn, only thin out well."

"EXPLOSIONS" OF GASOLINE.

A recent so-called "explosion of gasoline" in a Pullman car standing upon the tracks at Pittsburg, reminds us that there is probably no one thing about which there is more of popular error than this matter of the explosion of gasoline. The incident referred to illustrates this ignorance. The carpets, plush trimmings, etc., of the car were being cleaned with gasoline, when suddenly there was a terrific explosion which wrecked the car, injured three other cars standing near by, and rendered the persons working in the car unconscious. The press dispatch goes on to say that the manner in which the gasoline became ignited is not explained, and that the cause of the explosion is a mystery. Now, the fact is that gasoline did not explode, and that gasoline will not explode. The cleaning that was being done in this car simply gave opportunity for the rapid evaporation of a considerable quantity of gasoline. This vapor, mixed with the air contained in the car, formed an explosive mixture of gas; and this gas coming into contact with a flame, such as a lighted match, became ignited and exploded, as such a mixture of gasoline vapor and air always will do. Had the windows and doors of this car been open, so that the vapor would have had a chance to get out of the car as it formed, there would probably have been no explosion. But it should be remembered by all who have to do with gasoline, turpentine, or any volatile oils, that when these oils are allowed to vaporize, in a confined space, and the mixture of air and vapor thus formed becomes ignited, there will be an explosion.

FLAX FIBER.

It is thought by some that our country is too dry to grow flax for fine line fiber, and it is true that during certain dry years we cannot produce flax of the highest quality, writes Prof. W. M. Hays of the Minnesota state agricultural experiment station. That we can produce a fine line of fiber has been shown by the Minnesota experiment station as well as by some private parties. There is now a flax manufacturing firm at Northfield which has grown during the past year several hundred acres of flax for fiber, and that is perfecting flax pulling machinery in which we have great confidence. Where the flax is grown thickly and on clean land and properly pulled, it will be able during the year most favorable in moisture to produce large crops of fiber.

I look for a very rapid stride in the flax fiber industry in the Northwest. These people at Northfield are retting their flax in large tanks at a comparatively high temperature, thus enabling them to rapidly ret and scutch large quantities of fiber. The drying is done by artificial heat. By this means most excellent results can be obtained in both retting and drying, as conditions can be better controlled than in dew, river or lake retting. In many parts of the Northwest there are many lakes and rivers which would doubtless furnish excellent places for retting flax straw. During the past season the Minnesota experiment station has had under way quite a number of experiments for raising flax for fiber, for seed, and for seed and fiber combined, and in due time will have a report to make on this subject. At present there are quite a number of flax fiber mills throughout the Northwest which manufacture tow for the use of upholsterers and others. These factories have usually paid well and have given farmers a few dollars per acre for their straw. But as this market is comparatively easy to meet, and as the product does not sell for a very high price, the farmers do not get nearly as much for their fiber as it would be worth if it could be worked into some valuable products.

In addition to the above uses of flax fiber there is one more use, which does not require much attention to the careful preservation of the straw in harvesting, and that is to transform the broken straw as it comes from the thrasher into pulp for the manufacture of pails, tubs and various kinds of kitchen and other wares. At Mankato is a prosperous plant for this line of manufactures.

Two carloads of rice were shipped from a Louisiana plantation to Kansas City recently, the first of its kind on record. It came from S. Buhler of Oberlin, La., and it is said that the completion of the extension of the K. C., P. & G. R. R. will be followed by further shipments from that section.

Great as are the obstacles to a change from the present to the metric system, they are not insuperable. In France, where it originated, it was the longest in getting into general use, owing to vacillating legislation and frequent revolutionary movements. But in Germany only two years were required to transfer theirs to the metric system, while Austria effected the change in three years, and in neither case was there any serious trouble.

Grain Dealers' Associations.

THE GRAIN, HAY AND FEED RECEIVERS' ASSOCIATION OF CINCINNATI.

President, Chas. S. Maguire; secretary, Peter Van Leunen; treasurer, James A. Loudon.

THE GRAIN RECEIVERS' AND SHIPPERS' ASSOCIATION OF CHICAGO.

President, John Hill Jr.; vice-president, S. H. Greeley; secretary, W. N. Eckhardt; treasurer, Wm. Nash.

CAR GRAIN ASSOCIATION OF BUFFALO.

President, Charles Kennedy; vice-president, J. H. Rodebaugh; treasurer, W. V. Downer; secretary, S. W. Yantis.

THE GRAIN RECEIVERS' ASSOCIATION OF MINNEAPOLIS.

President, A. M. Woodward; vice-president, W. G. Nicholls; secretary, Wm. B. Mohler; treasurer, H. W. Commons.

SOUTHERN ILLINOIS GRAIN BUYERS' ASSOCIATION.

President, W. D. Sparks, Alton; vice-president, J. E. Duffield, Jerseyville; treasurer, W. B. Pierce, Alton; secretary, G. E. Brown, Brighton.

ILLINOIS GRAIN DEALERS' ASSOCIATION.

President, John Crocker, Maroa; vice-president, E. R. Ulrich, Jr., Springfield; treasurer, F. M. Pratt, Decatur; secretary, B. S. Tyler, Decatur.

CENTRAL IOWA GRAIN DEALERS' ASSOCIATION.

President, Allen Smith, Boone; vice-president, B. A. Lockwood, Des Moines; treasurer, M. McFarlin, Des Moines; secretary, M. T. Russell, Des Moines.

GRAIN SHIPPERS' ASSOCIATION OF NORTHWESTERN IOWA.

President, T. M. C. Logan, Onawa; vice-president, E. M. Parsons, Carroll; secretary and treasurer, F. D. Babcock, Ida Grove; assistant secretary, F. G. Butler, Schaller.

OHIO GRAIN DEALERS' ASSOCIATION.

President, Daniel McAllister, Columbus; vice-president, J. B. Van Wagener, London; treasurer, Jesse Brundige, Kingston; secretary, Huntington Fitch, Columbus.

GRAIN DEALERS' ASSOCIATION OF SOUTHWESTERN IOWA AND NORTHWESTERN MISSOURI.

President, R. R. Palmer, Creston, Iowa; vice-president, E. H. Vanscholack, Griswold, Iowa; treasurer, J. B. Samuels, Riverton, Iowa; secretary, G. A. Stibbens, Coburg, Iowa.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago since March 15 has been as follows:

March.	No. 2† R.W.WHT Low.	No. 2† R.W.WHT High.	No.2 SPG WHT.† Low.	No.2 SPG WHT.† High.	No. 2 Corn. Low.	No. 2 Corn. High.	No. 2 Oats. Low.	No. 2 Oats. High.	No. 2 Rye. Low.	No. 2 Rye. High.	No. 3‡ Barley Low.	No. 3‡ Barley High.	No. 1§ Flaxseed Low.	No. 1§ Flaxseed High.
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	...	...	62¼	62¼	28¼	28⅝	19	19¼	...	...	25	36	90	90
17	...	...	...	...	28¼	28¼	19	19¼	...	...	25	34	90	90
18	...	...	...	...	28½	28⅝	19¼	19¾	...	...	27	34	90	90¼
19	...	...	...	...	28½	28⅝	19	19¾	36	36	25	34	90½	90½
20	...	...	...	...	28¼	28⅝	19	19½	...	...	26	36	90¼	90¼
21	...	...	...	...	28⅜	28⅞	19	19¾	35½	35½	26	33	90	90
22*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	66½	66½	...	...	28¼	28⅝	19	19¼	35½	35½	25	33	90	90
24	65	65¼	...	...	28	28¼	18¼	18½	...	...	25	35	90	90
25	...	...	...	...	28¼	28¼	18¼	18¾	...	...	25	33½	90	90
26	65¾	65¾	...	...	28¼	28¾	19	19⅛	35¾	35¼	25	34	89¾	89¾
27	...	...	...	...	28⅝	28⅞	19	19¼	35¼	35¾	25	32	89¼	89½
28	66½	66½	...	...	28⅝	29	19	19¼	...	...	27	34	88	89¼
29	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	67¾	67¾	...	...	28⅝	29	19	19½	36	36	25	34½	88	88¼
31	...	...	...	...	28½	28⅝	18¾	19¼	35¾	36	26	34	88	88
April	...	...	...	...	...	...	...	...	...	...	...	...	...	...
1	...	...	...	...	28¼	28¾	19	19⅜	...	...	25	35	88	88¼
2	...	...	...	...	29	29	19¼	19¼	35½	35½	27	32	88½	88½
3*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	...	...	...	...	29	29⅛	19¼	19¼	...	...	26	36	88½	88½
5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	...	...	...	...	29	29¼	19¼	19½	36	36	26	38	88¼	88¾
7*	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	71¼	71¼	...	...	29¼	29¾	19⅝	19¾	...	...	27	38	90	90
9	70½	71	...	...	29⅝	29⅞	...	...	...	...	28	36	90	90½
10	...	...	...	...	29⅞	29⅝	19⅝	19⅝	...	...	29	34	90	90½
11	71	71	...	...	...	...	19	19⅜	...	...	29	35	90	90½
12	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	...	...	...	...	29⅛	29⅛	19⅜	19⅝	37	37	27	35	91	91
14	...	...	...	...	30¼	30¼	19¾	19¾	38¼	38¼	28	38	92	92
15	...	...	...	...	...	...	...	...	...	...	...	...	...	...

*Holiday. †Free on board, switched and delivered. ‡Free on board or switched. §On track.

During the week ending March 21 Prime Contract Timothy sold at $3.20@3.40 per cental, Prime Contract Clover Seed at $7.35@7.50, Hungarian at $0.65 @0.75, German millet at $0.65@0.85, buckwheat at $0.55@0.75 per 100 pounds.

During the week ending March 28 Prime Contract Timothy sold at $3.10@3.42½ per cental, Prime Contract Clover Seed at $6.75@7.30, Hungarian at $0.65 @0.80, German millet at $0.65@0.95, buckwheat at $0.55@0.70 per 100 pounds.

During the week ending April 4 Prime Contract Timothy sold at $3.15@3.30 per cental, Prime Contract Clover Seed at $6.25@7.25, Hungarian at $0.65 @0.80, German millet at $0.75@0.95, buckwheat at $0.55@0.70 per 100 pounds.

During the week ending April 11 Prime Contract Timothy sold at $3.25@3.35, Prime Contract Clover Seed at $7.50, Hungarian at $0.65@0.75, German millet at $0.75@1.00, buckwheat at $0.55@0.70 per 100 pounds.

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 20 months ending with March, as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts. 1895-96.	Receipts. 1894-95.	Shipments. 1895-96.	Shipments. 1894-95.
August	1,257,850	1,306,250	538,860	429,373
September	1,799,050	751,300	1,159,128	375,713
October	1,975,450	801,350	1,026,467	351,833
November	1,202,300	426,800	462,422	143,733
December	817,650	459,962	452,984	111,931
January	493,900	92,950	214,513	70,016
February	359,700	85,800	189,892	105,912
March	384,450	75,900	303,301	64,456
April	....	52,250	....	49,545
May	....	88,000	....	196,801
June	....	86,900	....	37,865
July	....	114,950	....	33,379
Total bushels	8,290,400	4,342,412	4,347,567	1,970,557

Inspector Stevens reports receipts in March, 1892, 592,900; in 1893, 367,950; in 1894, 44,000 bushels. Shipments in March, 1892, 223,395; in 1893, 333,257; in 1894, 92,050 bushels. Receipts for the first three months of the past five years are reported as follows: In 1892, 1,931,600; 1893, 952,050; 1894, 287,100; 1895, 254,650; 1896, 1,238,050 bushels. Shipments for the same time: In 1892, 720,634; 1893, 890,073; 1894, 421,369; 1895, 240,387; 1896, 707,706.

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending April 11, as compared with same weeks last year, have been as follows:

Articles.	For week ending April 11. 1896.	For week ending April 13. 1895.	For week ending April 4. 1896.	For week ending April 6. 1895.
Wheat, bushels	624,000	1,045,000	599,000	1,221,000
Corn, bushels	1,599,000	583,000	1,961,000	818,000
Oats, bushels	313,000	3,000	333,000	4,000
Rye, bushels	90,000	....	44,000	....
Flour, barrels	220,700	232,000	174,300	225,000

RECEIPTS AND SHIPMENTS AT TOLEDO.

The receipts and shipments of grain and hay at Toledo, Ohio, during the month ending March 31, as compared with the same period of the preceding year, were, according to Denison B. Smith, secretary of the Produce Exchange, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	119,300	572,000	109,000	868,000
Corn, bushels	347,000	691,000	161,000	717,000
Oats, bushels	4,400	8,000	14,000	7,000
Barley, bushels	2,200	7,800	....	....
Rye, bushels	2,900	1,700	2,000	24,000
Clover Seed, bags	17,060	18,482	25,413	23,773
Flour, barrels	3,849	7,330	50,248	59,323

RECEIPTS AND SHIPMENTS AT CINCINNATI.

The receipts and shipments of grain and hay at Cincinnati, Ohio, during the month ending March 31, as compared with the same period of the preceding year, were, according to C. B. Murray, superintendent of the Chamber of Commerce, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	38,223	110,349	37,690	95,619
Corn, bushels	334,832	293,594	52,320	37,521
Oats, bushels	294,517	270,654	128,387	174,572
Barley, bushels	202,650	70,885	2,458	51
Rye, bushels	25,985	30,007	12,307	19,367
Clover Seed, bags	8,691	8,253	7,509	6,908
Timothy Seed, bags	8,365	6,698	5,860	4,480
Other grass seeds, bags	4,912	2,921	7,054	8,635
Hay, tons	4,898	10,455	2,146	6,327
Flour, barrels	125,628	137,152	93,264	106,184
Malt, bushels	....	....	....	....

RECEIPTS AND SHIPMENTS AT SAN FRANCISCO.

The receipts and shipments of grain and hay at San Francisco, Cal., during the month ending March 31, as compared with the same period of the preceding year, were, according to T. C. Friedlander, secretary of the Produce Exchange, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, centals	451,731	979,907	516,696	1,080,210
Corn, "	27,915	17,611	4,787	3,349
Oats, "	25,560	38,650	1,036	322
Barley, "	208,272	69,092	175,331	18,350
Rye, "	5,545	2,292	55,698	....
Flaxseed, bushels	1,306	....	....	....
Hay, tons	10,137	8,452	609	....
Flour, barrels	112,415	112,188	72,897	81,504
Bran, sacks	57,315	28,795	No rec'rd	....
Middlings, sacks	12,869	....	No rec'rd	....

RECEIPTS AND SHIPMENTS AT PEORIA.

The receipts and shipments of grain and hay at Peoria, Ill., during the month ending March 31, as compared with the same period of the preceding year, were, according to R. C. Grier, secretary of the Board of Trade, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	117,000	40,800	78,000	15,600
Corn, bushels	1,770,800	1,001,900	710,100	196,750
Oats, bushels	1,594,650	1,112,100	1,512,150	1,149,200
Barley, bushels	259,700	141,400	194,700	99,400
Rye, bushels	12,600	6,000	4,200	2,400
Mill Feed, tons	1,640	585	7,229	6,896
Seeds, pounds	325,000	180,000	60,000	114,720
Broom Corn, pounds	375,000	75,000	155,024	30,000
Hay, tons	6,120	2,450	2,800	320
Flour, barrels	25,650	28,350	28,800	32,850
Spirits and Liquors, bbls.	825	2,575	14,021	14,672
Syrup and Glucose, bbls.	4,500	722	46,749	38,630

RECEIPTS AND SHIPMENTS AT MILWAUKEE.

The receipts and shipments of grain and hay at Milwaukee, Wis., during the month ending March 31, as compared with the same period of the preceding year, were, according to Wm. J. Langson, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	659,650	684,864	98,560	3,900
Corn, bushels	194,350	95,550	3,250	7,150
Oats, bushels	875,000	643,000	749,600	637,814
Barley, bushels	782,400	307,055	444,246	211,055
Rye, bushels	108,625	61,800	21,600	43,000
Grass Seed, pounds	791,370	408,353	645,502	281,160
Flaxseed, bushels	15,715	4,604	11,020	....
Hay, tons	2,292	2,167	538	36
Flour, barrels	275,800	163,650	412,635	296,071

RECEIPTS AND SHIPMENTS AT CHICAGO.

The following table, compiled by George F. Stone, secretary of the Board of Trade, shows the receipts and shipments at Chicago during March, 1896 and 1895, of seeds, hay and broom corn:

Receipts.	Timothy lbs.	Clover lbs.	Other Grass Seeds, lbs.	Flax-seed, bu.	Broom Corn, lbs.	Hay, tons.
1895	4,912,930	1,528,998	729,921	90,514	322,500	20,978
1896	6,880,379	2,040,241	651,910	418,421	1,538,070	34,783
Shipments						
1895	5,051,546	1,662,502	825,239	42,998	323,352	1,487
1896	10,459,146	1,982,716	865,188	255,505	1,063,075	18,981

RECEIPTS AND SHIPMENTS AT MINNEAPOLIS.

The receipts and shipments of grain and hay at Minneapolis, Minn., during the month ending March 31, as compared with the same period of the preceding year, were, according to G. D. Rogers, secretary of the Chamber of Commerce, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	4,746,400	4,139,320	615,620	566,530
Corn, bushels	200,910	49,980	91,890	5,160
Oats, bushels	1,031,960	296,100	649,350	386,190
Barley, bushels	182,970	29,020	54,890	33,380
Rye, bushels	60,520	9,210	54,060	18,400
Flaxseed, bushels	89,220	2,500	105,800	27,000
Hay, tons	2,207	3,599	224	222
Flour, barrels	12,820	17,148	876,424	761,756

RECEIPTS AND SHIPMENTS AT DETROIT.

The receipts and shipments of grain and hay at Detroit, Mich., during the month ending March 31, as compared with the same period of the preceding year, were, according to F. W. Waring, assistant and acting secretary of the Board of Trade, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	164,421	199,485	27,129	61,749
Corn, bushels	211,244	225,626	123,660	105,353
Oats, bushels	164,456	107,967	4,247	3,401
Barley, bushels	153,553	44,925	....	....
Rye, bushels	8,090	3,293	2,872	1,601
Hay, tons	940	650	....	....
Flour, barrels	18,080	7,787	16,150	10,235

RECEIPTS AND SHIPMENTS AT DULUTH.

The receipts and shipments of grain and hay at Duluth, Minn., during the month ending March 31, as compared with the same period of the preceding year, were, according to Frank E. Wyman, secretary of the Board of Trade, as follows:

Articles.	Receipts. 1896.	Receipts. 1895.	Shipments. 1896.	Shipments. 1895.
Wheat, bushels	3,346,576	1,743,709	147,209	92,609
Corn, bushels	38,378	....	....	....
Oats, bushels	233,531	61,846	73,074	42,207
Barley, bushels	147,107	4,269	7,884	36,836
Rye, bushels	23,814	10,271	....	....
Flaxseed, bushels	87,269	....	....	17,514
Flour, barrels	112,920	63,104	158,612	176,961
Flour production Duluth and Superior	....	....	....	....

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the 40 weeks ending April 4, for the last three years, according to the Cincinnati Price Current were as follows:

	1895-96.	1894-95.	1893-94.
St. Louis	10,737,000	8,640,000	11,586,000
Toledo	5,554,000	13,794,000	11,326,000
Detroit	2,038,000	3,695,000	7,710,000
Kansas City	7,577,000	6,003,000	11,868,000
Cincinnati	865,000	934,000	923,000
Winter Wheat	26,771,000	33,066,000	43,413,000
Chicago	21,071,000	22,176,000	19,672,000
Milwaukee	8,529,000	5,593,000	9,373,000
Minneapolis	66,639,000	44,855,000	42,827,000
Duluth	49,374,000	30,804,000	29,132,000
Spring Wheat	145,613,000	103,428,000	101,004,000
Total, 40 weeks	172,384,000	136,494,000	144,417,000

The Baltimore & Ohio Railroad intends to add 5,000 freight cars and 75 locomotives to its rolling stock. This will materially increase the road's facilities for transporting grain.

INSPECTED RECEIPTS AT CHICAGO.

According to the report of Chief Grain Inspector D. W. Andrews, the grain received at Chicago during the month of March, 1896, was graded as follows:

WINTER WHEAT.

Railroad.	White.			Hard.			Red.			
	2	3	4	1	2	3	1	2	3	4	No Grde.
C., B. & Q.		1			2	4		4	19	4	
C., R. I. & P.					3	7		4	3	5	
Chicago & Alton						4			1	2	
Illinois Central					1	5		1	3	3	
Freeport Div., I. C.								1	1		
Galena Div., C. & N. W.						1		1		2	
Wis. Div., C. & N. W								3	2		
Wabash									4	3	1
C. & E. I.											
C., M. & St. P.	1	2						8	10		1
Wisconsin Central											
Chicago & Great West.											
A., T. & S. Fe						2		2	2	4	
E., J. & E.									1		
Through and special					2			1			
Total each grade	1	3			8	23		25	46	23	2
Total winter wheat			4			31					96

SPRING WHEAT.

Railroad.	Northern.	2	3	4	No Grade.	White.		Colorado.		Mixed Wheat.	
						2	3	2	3	2	3
C., B. & Q.			20	12							
C., R. I. & P.	17	23	82	17							
Chicago & Alton			1								
Illinois Central											
Freeport Div., I. C.	2	6	16	4	1						
Galena Div., C. & N. W.		10	90	17	1			6	8		
Wis. Div., C. & N. W.		8	26	1	1						2
Wabash											
C. & E. I.											
C., M. & St. P.	6		79	7							
Wisconsin Central											
Chicago & Great West.	2		256	1							
A., T. & S. Fe			2								
E., J. & E.		4	56	15							
Through and special		5									
Total each grade	27	56	628	74	3			6	8		2
Total spring wheat					788						2

CORN.

Railroad.	Yellow.		White.		2	3	4	No Grade.
	2	3	2	3				
C., B. & Q.	125	407	24	63	682	421	47	1
C., R. I. & P.	77	153	23	17	452	428	20	
Chicago & Alton		221		76	8	360	108	1
Illinois Central	36	429	26	121	6	193	43	3
Freeport Div., I. C.	4	100		3	1	83	4	
Galena Div., C. & N. W.	250	380	4	10	78	398	16	
Wis. Div., C. & N. W								
Wabash	13	133	2	27	3	56	17	2
C. & E. I.	13	28	15	33	16	60	10	
C., M. & St. P.	100	154		9	312	633	9	
Wisconsin Central								
Chicago & Great West.	42	34	26	21	681	358	11	
A., T. & S. Fe		94	1	12		64	4	
E., J. & E.	52	195	5	14	323	459	27	
Through and special	27	411		19	3	96	30	
Total each grade	739	2739	126	425	2,565	3609	346	7
Total corn								10,556

OATS AND RYE.

Railroad.	OATS.								RYE.		
	White.			2	3	Wt C.*		No Grade.	2	3	No Grade.
	1	2	3			1	2				
C., B. & Q.	38	430	74	80				93	4		
C., R. I. & P.	50	733	30	343			4	9	8		
Chicago & Alton	7	18	14	145							
Illinois Central	11	110	181	109		1	1		1		
Freeport Div., I. C.	37	138	6	103			1	6			
Galena Div., C. & N.W.	174	729	46	320			7	9	2		
Wis. Div., C. & N. W.	43	267	8	42				18			
Wabash	2	30	39	41				3			
C. & E. I.		7	16	27				3			
C., M. & St. P.	211	645	48	388			12	16	2		
Wisconsin Central		16		20				5			
Chicago & Great West.	53	203	43	82		1		13	1		
A., T. & S. Fe	16	78	14	65				3			
E., J. & E.	103	75	1	34				2	2		
Through and special	4	28	11	25			2				
Total each grade	749	3507	531	1824		2	27	180	20		
Total oats and rye							6640				200

* White Clipped.

BARLEY AND TOTAL GRAIN RECEIPTS.

Railroad.	Bay Brewing.	Chevalier.	2	3	4	5	No Grade.	Total No. Cars all Gr'n by Road.
	3	3						
C., B. & Q.				106	10	5	2	2,678
C., R. I. & P.				92	44	6		2,650
Chicago & Alton				1	1			968
Illinois Central								1,284
Freeport Div., I. C.				95	3	2	1	618
Galena Div., C. & N. W.				74	29	1	2	2,665
Wis. Div., C. & N. W.			4	311	38	6	11	791
Wabash								376
C. & E. I.								228
C., M. & St. P.				519	135	6	1	3,314
Wisconsin Central					1			42
Chicago & Great West.				69	50	1		1,918
A., T. & S. Fe				1				364
E., J. & E.					1			1,369
Through and special								664
Total each grade			4	1,268	312	27	17	19,959
Total barley							1,628	19,959
Total grain, cars								

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, April 11, 1896, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, Bu.	Oats, bu.	Rye, bu.	Barley, Bu.
Albany		10,000	40,000		
Baltimore	105,000	614,000	250,000	75,000	
Boston	114,000	36,000	131,000		
Buffalo	901,000	17,000	32,000	185,000	250,000
do. afloat					
Chicago*	17,053,000	6,443,000	1,916,000	457,000	17,000
do. afloat	1,411,000	6,731,000	1,525,000		
Cincinnati	11,000	3,000	20,000	1,000	26,000
Detroit	247,000	13,000	5,000	13,000	3,000
Duluth	14,352,000	144,000	1,180,000	220,000	456,000
do. afloat	512,000				
Indianapolis	100,000	31,000			
Kansas City	1,220,000	160,000	66,000	28,000	
Milwaukee	467,000		17,000	271,000	35,000
do. afloat	176,000		280,000		
Minneapolis	19,086,000	57,000	739,000	116,000	179,000
Montreal	967,000	75,000	417,000	6,000	62,000
New York	783,000	101,000	1,484,000	14,000	6,000
do. afloat	16,000				10,000
Oswego					17,000
Peoria	11,000	17,000	280,000	5,000	
Philadelphia	114,000	55,000	182,000		
St. Louis	1,181,000	879,000	506,000	3,000	
do. afloat		451,000			
Toledo	594,000	701,000	68,000	115,000	
do. afloat		140,000			
Toronto	29,000	24,000	101,000		38,000
On Canals		8,000	12,000		
On Lakes					
On Miss. River		137,000	19,000		
Total	59,330,000	16,847,000	9,250,000	1,509,000	1,099,000
Corresponding date 1895	70,487,000	12,221,000	5,727,000	213,000	489,000

* Including grain in National Elevator, which is not regular under the rules of the Chicago Board of Trade.

DESTINATION OF AMERICAN WHEAT EXPORTS.

The last report of the Bureau of Statistics shows the destination of the wheat exported from the United States to be as follows:

Countries.	Month ending Feb. 29.		Twelve months ending Feb. 29.	
	1896.	1895.	1896.	1895.
United Kingdom	3,391,358	3,585,541	33,114,095	38,698,170
Germany	161,352	184,383	592,827	2,049,564
France		117,800	114,099	977,579
Other Europe	583,276	688,209	5,426,995	8,615,974
British North America	18,488	16,537	2,124,736	2,479,939
Mexico	750	802	1,185	7,405
Central American States and British Honduras	4,000	3,625	33,203	62,040
West Indies and Bermuda	10	35	11,692	5,183
Brazil			31	63
Other South America	204	260	3,689	998
Asia and Oceanica	420,712	4,196	1,220,924	27,795
Africa	400,083	40	1,072,384	17,372
Other countries				52
Total bushels	4,980,233	4,601,428	43,715,860	52,942,134

DESTINATION OF AMERICAN CORN EXPORTS.

The last report of the Bureau of Statistics shows the destination of the corn exported from this country to be as follows:

Countries.	Month ending Feb. 29.		Eight months ending Feb. 29.	
	1896.	1895.	1896.	1895.
United Kingdom	6,903,927	2,017,088	38,394,382	7,373,247
Germany	1,871,029	312,044	8,909,295	1,229,951
France	678,069	42,012	2,976,411	249,101
Other Europe	2,870,012	332,159	13,814,038	1,971,129
British North America	183,221	41,766	3,130,202	900,855
Mexico	165,347	12,652	712,593	143,419
Central American States and British Honduras	1,627	14,278	37,112	101,552
Cuba	19,236	28	168,302	312,690
Puerto Rico			100	1,200
Santo Domingo	57	560	838	3,306
Other West Indies and Bermuda	81,918	57,426	477,200	428,143
South America	7,412	8,037	98,822	88,422
Asia and Oceanica	460	482	34,332	7,988
Other countries	198,981		353,832	3,296
Total bushels	12,981,296	2,838,532	68,107,459	12,814,299

Henry R. Bertulert claims that at the special instance and request of Osborn-McMillan Elevator Co. of Minneapolis, Minn., he expended $1,191.22 in the purchase and sale of grain, and he has begun suit to recover the amount.

Farmers, as a general rule, are not careful enough in their selection and care of corn for seed. Many practice storing their seed corn in an open corn crib before it is thoroughly dry. The germ of corn, being porous, absorbs moisture and is subject to hard freezing during the winter. As a result the germ is partially or wholly destroyed, and the chances of its growing under the most favorable circumstances is very limited. An authority says while husking the best ears should be saved and placed in a dry room and cured by fire drying. Corn treated in this way is sure to grow and make a vigorous and healthy growth.

IMPORTS AND EXPORTS OF FOREIGN BREADSTUFFS.

The total value of breadstuffs imported in February, according to the last report of the Bureau of Statistics, was $105,186, against a valuation of $188,866 for February preceding; and during the eight months ending February breadstuffs valued at $2,025,199 were imported, against an amount valued at $2,146,856 imported during the corresponding eight months of 1894-95.

Barley aggregating 122,081 bushels was imported in February, against 222,771 bushels imported in February 1895; and during the eight months ending February 680,137 bushels were imported, against 1,807,617 bushels imported in the same time of 1894-95.

Corn amounting to 270 bushels was imported against 2,108 bushels imported in February, 1895; and in the eight months ending February 3,357 bushels were imported, against 7,518 bushels imported in the same time in 1894-95.

Oats amounting to 4,016 bushels were imported in February, against 30,562 bushels imported in February, 1895; and in the eight months ending February 11,137 bushels were imported, against 224,183 bushels imported in the same time in 1894-95.

Wheat aggregating 4,342 bushels was imported in February, against 46 bushels imported in February, 1895; and during the eight months ending February 1,614,180 bushels were imported, against 1,089,537 bushels imported in the same time in 1894-95.

No rye was imported in February, 1896, or 1895; and during the eight months ending February 129 bushels were imported, against 12,838 bushels imported in the same time in 1894-95.

Of imported breadstuffs an amount valued at $50,230 was exported in February, against $359 in February, 1895; and during the eight months ending February imported breadstuffs valued at $1,222,508 were exported, against an amount valued at $72,766 exported in the same time in 1894-95.

No imported barley was exported in February, 1896, or 1895; and during the eight months ending February 8,396 bushels, valued at $2,524, were exported, against 3,739 bushels, valued at $1,849, exported in the same time in 1894-95.

Of imported wheat 65,334 bushels were exported in February, against none in February, 1895; and during the eight months ending February 1,850,659 bushels were exported, against 125,817 bushels exported in the same time in 1894-95.

SEED EXPORTS AND IMPORTS.

Seeds valued at $36,267 were exported in February, against an amount valued at $342,097 exported in February, 1895; and in the eight months ending February seeds valued at $1,935,089 were exported, against an amount valued at $2,329,128 exported in the same time in 1894-95.

Clover seed aggregating 878,513 pounds was exported in February, against 2,907,076 pounds exported in February, 1895; and in the eight months ending February 3,722,804 pounds, valued at $296,027, were exported, against 19,188,843 pounds, valued at $1,779,165, exported in the same time in 1894-95. Cotton seed aggregating 1,906,708 pounds, was exported in February, against 1,111,128 pounds exported in February, 1895; and in the eight months ending February 15,771,923 pounds, valued at $98,388, were exported, against 8,370,978 pounds, valued at $68,581, exported in the same time in 1894-95.

There were 105 bushels of flaxseed, valued at $105, exported in February, against none in February, 1895; and in the eight months ending February 29,069 bushels, valued at $31,609, were exported, against 1,195 bushels, valued at $1,396, exported in the same time in 1894-95.

Timothy aggregating 1,637,757 pounds was exported in February, against 743,594 pounds exported in February, 1895; and in the eight months ending February 7,133,563 pounds, valued at $321,971, were exported, against 3,114,775 pounds, valued at $175,582, exported in the same time in 1894-95.

Other seeds imported were valued at $36,267 for February, against $24,664 for February, 1895; and for the eight months ending February exports were valued at $317,094, against $304,404 for the same time in 1894-95.

Flaxseed imported in February amounted to 8,005 bushels, valued at $9,899, against 332,430 bushels, valued at $329,210, imported in February, 1895; and in the eight months ending February 699,605 bushels, valued at $752,960, were imported, against 2,420,599 bushels, valued at $2,952,673, imported in the same time in 1894-95.

Other seeds, imported free of duty, were valued at $105,215 for February, against $79,800 for February, 1895; and the value of those imported in the eight months ending February was $847,907, against $1,095,131 for the same time in 1894-95. Other dutiable seeds imported were valued at $57,750 for February, against $59,831 for February, 1894-95; and the value of those imported in the eight months ending February was $514,548, against $565,735 for the same time in 1894-95.

ELEVATOR AND GRAIN NEWS

Send us the grain news of your district.

An elevator is being erected at Attica, Ohio.

James Kitchen will erect an elevator at Mattoon, Ill.

An elevator is to be built at Chinton, Mo., at a cost of $60,000.

It is reported that an elevator is to be erected at Haldane, Ill.

Plans are on foot to erect an elevator at Council Bluffs, Iowa.

An elevator is to be built at Richards Station, La Salle Co., Ill.

Preparations are being made to erect an elevator at Gleichen, Man.

Pelham Morrow may establish a rice cleaning mill at Yorkville, S. C.

George Canard has engaged in the grain business at Claytonville, Ill.

F. N. Egerton intends to erect a cottonseed oil mill at Louisburg, N. C.

G. E. McGehee of Lafayette, Ala., will establish a cottonseed oil mill.

B. F. Munroe, grain and hay dealer of Providence, R. I., has assigned.

The Hudnut elevator at Green Valley, Ill., is to be enlarged and improved.

Farmers are organizing a company at Sheridan, Wyo., to erect an elevator.

Dart & Bonner, grain dealers of Pierpont, S. D., have dissolved partnership.

Wm. Postelwaite of Brandon has leased the Lowden elevator at Souris, Man.

O'Hara Bros'. new elevator at Carlock, Ill., is now completed and receiving grain.

L. T. Morris has succeeded Mather & Son, dealers in grain, etc., at LeRoy, Mich.

C. L. Mesick, dealer in grain and hay at Springfield, Mass., assigned recently.

An elevator is being erected at Cramer, Ill., under the supervision of Elmer Davis.

The Cathwood Mfg. Co. will erect a 20-ton cottonseen oil mill at Cathwood, S. C.

The Riverton Mill Co. is preparing to build a 25,000-bushel elevator at Riverton, Va.

Denis Baron, grain dealer of Amherstburg, Ont., assigned recently to W. S. Falls.

A. L. Rice has succeeded Rice & Isham, dealers in grain and coal at Windom, Minn.

Phillips, Bates & Co.'s grain warehouse at Hanover, Mass., is nearing completion.

Joseph E. Bourbon, dealer in grain, hay, etc., at Montreal, Canada, assigned recently.

It is reported that an elevator is to be erected at Rileysburg, Ind., by Danville parties.

The Richwood Distilling Co., Madison, Ind., has put in a No. 4 Cornwall Corn Cleaner.

C. T. Caldwell has succeeded Strod Hayes, dealer in grain, etc., at Sulphur Springs, Ind.

The new elevator at Kuhn, N. D., is nearing completion. It will be run by steam power.

Spears & Osgood, dealers in grain, coal, etc., at Alvin, Texas, have dissolved partnership.

A local paper of Brocton, N. Y., says with urban pride that that town now has a bucket shop.

E. R. Betterton and others are contemplating the erection of a distillery at Chattanooga, Tenn.

B. F. Ellis has succeeded Ellis & Kelly, who operated a cottonseed oil mill at Evergreen, Texas.

Harrison White, dealer in grain and implements at Beaver Creek, Minn., has removed to Luverne.

Houston, Webster & Co., dealers in grain, etc., at Middletown, N. Y., have dissolved partnership.

Bosworth & Wood have succeeded B. F. Wood & Co., dealers in grain, etc., at Leominster, Mass.

It is reported that John Schmidt and Joseph Miller of Milwaukee, Wis., expect to erect an elevator.

F. V. Haven & Co., grain commission dealers of Minneapolis, Minn., have dissolved partnership.

C. E. Hadley has closed out his grain business at Bradford, N. H., and has removed to Concord.

A. W. Wilkins, formerly a miller of Superior, Wis., and also associated with Angus Smith of Milwaukee in the grain business, is contemplating engaging in the grain business at Duluth and Minneapolis.

Farmers in the vicinity of Pine Island, Minn., have organized to build an elevator to cost about $6,000.

It is said that McCallister & Shelby will erect an elevator at Henderson, Ky., in the near future.

Phillip Rahm of New Orleans, La., recently bought of Barnard & Leas a No. 32 Special Grain Separator.

Farmers in the vicinity of Uinga, Man., are organizing to build an elevator of 30,000 bushels' capacity.

Wm. M. Hodge has commenced work on the construction of his new elevator at Williamstown, Mass.

J. J. Ahmann, wheat buyer of New Paynesville, Minn., has purchased N. L. Ladner's general store.

Jones & Wilkinson of Chrisney, Ind., have added a corn cleaner bought of the Barnard & Leas Mfg. Co.

It is said that two wealthy Kansas farmers are thinking of erecting a large elevator at Springfield, Mo.

Lowry, Steller & Vohner, grain and commission merchants of DeColo, Cal., have dissolved partnership.

The Frankton Land & Improvement Co. of Frankton, Ind., is erecting a mill and elevator at that place.

R. F. Cummings of Clifton, Ill., will put the B. S. Constant dumps and feeders in his elevator at that place.

The Armstrong Flour Mill Association of Vernon, B. C., has just completed a new 20,000-bushel elevator.

The Hezel Milling Co. of East St. Louis, Ill., is preparing to erect an elevator of 30,000 bushels' capacity.

Paul Huberich & Co. have succeeded Paul Huberich, dealer in grain and produce at Laredo, Texas.

Joseph Sheaff & Son of Holcomb, Ill., intend to build an elevator, and will also deal in coal and lumber.

The Washington County Flouring Mill Co. of Forest Grove, Neb., is erecting a 60,000-bushel grain elevator.

Drews Bros., who conducted an elevator and feed mill at Stillwater, Minn., assigned recently to G. I. Gorham.

W. J. Gilbert is now proprietor of the Pacific Feed Mills at Salt Lake City, Utah, and is dealing in grain, feed, etc.

It is expected that elevator A2 at Minneapolis, which burned recently, will be rebuilt in time for the new crop.

The new elevator at New Haven, Ind., in which Habegger & Stucky of Berne, Ind., are interested, is completed.

S. D. Grafflin & Son, grain dealers of Logansport, Ind., have removed their office to the Jordan Block in that city.

J. D. Allen, formerly of the firm of Allen Bros., has bought J. A. Bootes' elevator and grist mill at Beaver, Pa.

James Marker is building an elevator and warehouse at Millstadt, Ill., and will carry on a business in corn, hay etc.

The Hudnut Hominy Mill Co. of St. Joseph, Mo., is just completing a new corn crib with a capacity of 75,000 bushels.

Frank W. Gerdeman, grain merchant and farmer of Ottawa, Ohio, has assigned to H. W. Schmitchulte. Liabilities $13,000.

T. S. Mathewson, grain dealer of Brandon, Man., has purchased the business and plant of the Brandon Machine Works Co.

The Interstate Oil Co. has been incorporated at Augusta, Ga., and will shortly begin the erection of a cottonseed oil mill.

J. B. Walton & Sons, who operate an elevator at Thomasboro, Ill., are carrying on a successful coal and lumber business.

W. H. Berst writes us that he has purchased the Red Mill at Joliet, Ill., and is doing a general grain and milling business.

Heltzell & Thornberry have formed a partnership at St. Louis, Mo., and engaged in the hay and grain commission business.

A. Wacaser has 40,000 bushels of corn cribbed at Hammond, Ill., and his three sons, George, Frank and Milton Wacaser, have cribbed over 30,000 bushels.

About June 1 the west building of the Maltbile elevator will be torn down and a new one put up. It will be 40x80 feet. The damaged condition of the building necessitates this step. When completed the Hinckley elevator will be the largest and most complete one on this line of railway.—Beacon, Aurora, Ill.

The Rockford Sugar Refining Co.'s new plant at Rockford, Ill., is now in operation, consuming 12,000 bushels of corn a day.

John C. Folger and Homer Folger, grain men, have bought L. D. Platt's interest in the Alton Milling Co. at Alton, Iowa.

The Arcadia Board of Trade, grain dealer of Arcadia, Wis., has leased an engine, and will run its elevator by steam power.

E. F. McGonigle has withdrawn from the firm of Robt. S. McCarthy & Co., grain commission merchants of Philadelphia, Pa.

Jacob Bodewig, formerly of Hooper, Neb., has bought an elevator at Humphrey, where he has engaged in the grain business.

The report that the Northern Steamship Co. was preparing to erect two large elevators at Buffalo is said to be entirely erroneous.

John Fardy has purchased C. G. Deissner's grain and feed store at Waukegan, Wis., and is now carrying on a successful business.

Hamilton & Ekstrand, grain dealers of Ludlow, Ill., recently shipped out 17,000 bushels of corn in one week, emptying their elevator.

The firm of W. P. & L. L. Brown, dealers in grain, etc., at Groesbeck, Texas, has been dissolved, L. L. Brown continuing the business.

Philip J. Britt has been appointed receiver in supplementary proceedings for Elie S. Charlier, formerly a grain broker of New York City.

O. O. McLeland & Co. have succeeded J. R. Rowlin, grain dealer of Kempton, Ind., and are operating the elevator formerly run by him.

Davis & Crawford, grain dealers of Pesotum, Ill., are about to build corn cribs. The B. S. Constant dumps and feeders will be put in.

H. L. Kimball of Burt, Iowa, has traded his farm for C. L. Lund's elevator and grain and coal business, of which he took possession April 1.

James Hatfield has acquired the elevator at Towanda, Ill., formerly belonging to Jones Bros., and has engaged in the grain business.

James Crahen has traded his farm near Belleville, Wis., for an elevator at Merrimac, where he has engaged in the grain and stock business.

Douglas & Armstrong have purchased the grain business of Schroeder & Son at Marseilles, Ill., and will conduct the business in the old place.

The Rockport Milling Co. of Rockport, Ind., recently put in a corn sheller and cleaner combined, purchased of the Barnard & Leas Mfg. Co.

Robt. Lindblom & Co., commission merchants of Chicago, have established an office in New York City, Roy, Black & Co. being their representatives.

The firm of Nowels & Babcock, grain dealers and millers of Rensselaer, Ind., have dissolved partnership, W. C. Babcock succeeding to the business.

E. H. Langdon will operate a flax dressing mill at Laurel, Wash., this season. The mill will have a daily scutching capacity of 2½ tons of flax straw.

David Scheidegger writes us that he has engaged in the elevator and grain business at Woodburn, Ind., and may also engage in the milling business.

M. K. Hammond & Son of Stockton, Ill., have bought a No. 35 Barnard Special Grain Separator and other supplies from the Barnard & Leas Mfg. Co.

The Southern Grain Co. has purchased of the S. Howes Co. a line of the Eureka Grain Cleaners which is to be placed in its elevator at Rosedale, Kan.

The ruins of M. C. Ott's elevator at Wilton, Iowa, which was destroyed by fire recently, were sold for $7 on condition of being removed. Mr. Ott may rebuild.

The Farmers' Elevator Company has been organized at Northfield, Minn., with Gilbert Fish of Dundas as president. It is purposed to erect an elevator.

The Lake of the Woods Milling Co. of Winnipeg, Man., is reported to be considering the erection of several elevators at country points in Manitoba this season.

The Biggsville Elevator Co. has been incorporated at Biggsville, Ill., with a capital stock of $2,500, to operate an elevator. The incorporators are J. C. McDill, H. O. Garrity, R. E. McLain and Henry Clark.

A. J. Poor, of the Benton & Poor Grain Company, Kansas City, Mo., has sold out his interest in that firm to G. Benton, his former partner, and with William Murphy, of the Murphy Grain Company, formed a new firm, and will constitute the Murphy &

Poor Grain Company. C. G. Benton continues in the grain business under the firm name of the Benton Grain Company, occupying the old office of Benton & Poor.

A 20,000-bushel elevator is to be erected at Rush City, Minn., by the proprietors of the Rush City Roller Mills. It will be completed in time for the new crop.

The Wisconsin Milling Co.'s new elevator at Milwaukee is completed and in operation. It is equipped with modern machinery, and has a capacity of 500,000 bushels.

Condon & Black, grain dealers of Pesotum, Ill., have decided to build corn cribs near their elevator at that place, and put in the B. S. Constant dumps and feeders.

The McDaniel & Pittman Co. of Franklin, Ind., announces that it will probably increase its elevator capacity this season by the erection of two 25,000-bushel steel tanks.

D. W. Lane of Minneapolis has engaged in the grain business, having become a partner in the firm of F. V. Haven & Co. The name of the new firm is Haven, Lane & Co.

Geo. B. Ransom has engaged in the grain business at Merritt, Ill., and has purchased elevator supplies, including a Cornwall Corn Cleaner, from the Barnard & Leas Mfg. Co.

New York capitalists are said to be contemplating the establishment of a distillery and cattle feeding plant at Fremont, Neb., which will consume 2,000 bushels of grain a day.

Mr. Fitch, of the firm of Fitch & Drake, general merchants of Manchester, Conn., has disposed of his interest to his partner and is now connected with the Manchester Elevator Co.

The new transfer elevator at Kensington, Ill., which was constructed by the Simpson-Robinson Co. of Chicago for the Michigan Central Railroad, is completed and receiving grain.

Martin L. Sweet of Grand Rapids, Mich., a prominent business man, banker, grain dealer, etc., assigned recently. Liabilities are $175,000, with assets largely in excess of that amount.

R. A. Clisby & Sons, dealers in grain and coal at Arcola, Ill., have dissolved partnership, the business being continued by R. A. Clisby. John R. and Frank W. Clisby retire from the business.

It is said that Lester Andrews, the grain dealer of Danville, Ill., who was indicted for larceny and for selling grain left with him for storage, but who disappeared, has been found in Chicago.

It is reported that W. L. Mabbitt, a farmer of Clinton County, Indiana, has been indorsing his son's speculations on the Chicago Board of Trade, and has failed with liabilities and assets of $15,000.

F. H. Hopkins, grain commission merchant of Chicago, has formed a partnership with Downing, Cullison & Co. of Portland, Ore., where an office will be maintained under the firm name of Downing, Hopkins & Co.

The Illinois Central R. R. Co. has let contracts for the erection of an elevator at New Orleans, La., which, together with wharf and other facilities, will cost $450,000. It will have a capacity of about 1,000,000 bushels.

The N. L. Niver Co. has been incorporated at New York City with a capital stock of $5,000, to deal in hay, straw, oats, feed, etc. The directors are Margaret A. Niver, J. D. Strahmann and Peter Woolley of New York City.

The Crescent Grain Co. has been incorporated at Bloomington, Ill., with a capital stock of $25,000, to deal in grain, lumber and coal. The incorporators are Warren C. Darnell, Henry Linebarger and Almon H. Linebarger.

The Monetary Grain Association has been incorporated at Chicago with a capital stock of $10,000, to do a general commission business. The incorporators are Frank W. Schwartz, Benj. G. Kramer and Grant S. Wheeler.

The board of directors of the Farmers' Elevator Company of St. Peter, Minn., met and elected the following officers recently: Manager, H. S. Pettis; assistant manager, Frank Campbell. The officers deny that there is a shortage of $1,000, as had been reported.

William Greene, formerly of the firm of Greene & Co. of Dayton, Ohio, has rented the grain house recently occupied by Tucker & Son, and will buy and ship grain. Mr. Greene is improving the building and will add a corn sheller. He will erect an elevator at that place.

Crocker & Co., bankers and grain dealers of Maroa, Ill., have reorganized under the name of the Crocker Elevator Co. They have bought a half interest in the Kirby Elevator Co. at Wapella, where A. M. Kirby will be manager, and Mr. Irwin, formerly of Kenney, Ill., grain buyer. An elevator at Birbeck has been added, with John Malone as buyer. This makes nine stations the Crocker Elevator Co. has, and having bought the business of Currier & Childs of Argenta, Ill., a lumber business will also be carried on.

The Lowry Hay & Grain Co. of Kansas City, Mo., has completed a new brick warehouse into which it has moved. The company now has the best of facilities for handling hay and expects to confine itself to a commission business in that product.

Wm. J. Holmes, dealer in hay, straw and grain at New York City, assigned recently to Herbert A. Post, without preference. Liabilities are stated to be between $25,000 and $50,000. The failure is said to be due to dull trade and poor collections.

It is reported that the Farmers' Warehouse at Clear Lake, Minn., took in from September 1 to March 31 100,000 bushels of wheat, 38,000 bushels of flax, and about $1,500 worth of timothy seed, beside handling a large amount of flour and fuel.

A petition has been presented to the municipal council of Wolseley, Assa., asking that a by-law be submitted to the people for borrowing $6,500 to build an elevator of 30,000 bushels' capacity at that place. It is expected that the elevator will be built.

Edmund Norton, who has been engaged in the grain and stock brokerage business at Chicago, assigned recently. He is the brother of Lemuel D. Norton, the well-known miller, and has been well known in the grain business for over 20 years.

The well-known firm of J. R. Tomlinson & Co., grain and feed dealers of Philadelphia, Pa., has been dissolved. Mr. Tomlinson, the former head of the firm, died January 21. The business will be continued by M. F. Baringer, Mr. Tomlinson's partner.

It is reported that there is a large demand from farmers in North and South Dakota for storage room at Superior, Wis., and that the capacity of the public elevators there, 25,000,000 bushels, will be taxed to its utmost. In the Dakotas all wheat in store is subject to taxation after May 1.

The firm of Littlefield & Dixon, dealers in grain and flour at Portsmouth, N. H., has been dissolved, Daniel Littlefield retiring. Samuel Dixon, of the old firm, has formed a partnership with Daniel McIntire, and they are carrying on the business under the firm name of Dixon & McIntire.

E. H. Husted & Co., grain merchants of Buffalo, N. Y., who recently completed a large elevator, intend to build a warehouse which will be covered with corrugated iron, and equipped with newly patented machinery for grinding a combination feed of grain and hay. The building will cost about $5,000.

On April 1 the stock of the United Elevator Co., of St. Louis, Mo., sold as low as $3 in the open market, and is said to have been offered at less privately. A little over a year ago it was worth over $70. But the president of the company, Wm. T. Anderson, expresses confidence in the ultimate clearing up of all difficulties.

L. F. Webb, grain dealer of Assumption, Ill., has been indicted by the grand jury for doing a bucket shop business. Mr. Webb and his friends claim the indictments are the result of spite and a disposition on the part of his enemies to do him injury, and he claims that he was acting as agent of a Chicago commission firm.

The West Concord Farmers' Mercantile and Elevator Company has been organized at West Concord, Minn., with the following officers: President, E. H. Emerson; vice-president, Thomas Tollifson; recording officer, Karl Bullis. About $4,000 has been received on subscriptions and the erection of buildings will soon be commenced.

Bell & Yost, grain dealers of Fowler, Ind., intend to erect an addition to their elevator, which will be 24x36 feet. A stand of elevators for ear corn will be put in, using the B. S. Constant Dump and Elevator Feeder. They will also add 36 feet to one of the Constant Sheller Feeders, which is already in, to bring the grain from the addition to the sheller.

T. E. Hill, superintendent of the Heidenreich Construction Co., is superintending the construction of the new elevator at Mobile, Ala. A 14x36 Sioux City Corliss Engine of the finest pattern, with a 200-horse power Wainwright Heater, has been purchased for the elevator power plant, and a Racine Automatic Electric Light Engine with dynamos for 200 sixteen-candle power lights.

Van R. St. John of Mt. Pulaski, Ill., writes us that he has sold his stock in the Mt. Pulaski Grain Co., of which he was manager, to the other members of the firm, and after a needed rest of a few months will seek another location to go into the grain business. The company buys grain at Mt. Pulaski, Chestnut, Cornland, St. John Station, Buffalo Hart and Latham, at which places nearly 1,500,000 bushels of grain is handled annually during good seasons. The stockholders held a meeting recently at Mt. Pulaski, when the following officers were elected: President, F. C. Orton; secretary, Grant M. Sloan. Subsequently Mr. Sloan was appointed bookkeeper, and George H. Hubbard of Lincoln manager.

The Norfolk & Western Railroad is having plans made for increasing the capacity of its elevator at Portsmouth, Va., from 100,000 to 500,000 bushels, at a cost of $40,000. The work will be completed in time for the fall grain trade.

Frank and George Strant of Manchester, Conn., have organized under the name of Strant Bros., and have purchased the grain, feed and flour business of John M. Williams, of which they took charge April 1. Frank Strant has had long experience in the grain business, having been connected with the Manchester Elevator Co. for some time, the past five years as its manager.

Wesley Davis and Samuel Bagwell of Rossville, Kan., are cribbing 50,000 bushels of corn for Eastern parties. Mr. Davis recently built a crib 224 feet long and 16 feet wide for J. W. Gregory & Co. of Vermont. E. B. Merriam of Topeka and Governor Woodbury of Vermont expect to have 300,000 bushels cribbed by May 1. It is reported that they have invested $5,000 in corn cribs alone.

The Little Rock Mill and Elevator Co. is erecting a public elevator at Little Rock, Ark. It will be 33x75 feet, 50 feet in height, containing 18 storage bins with a total capacity of 75,000 bushels, and have an unloading capacity of 2,000 bushels per hour. There will be a power grain shovel, cleaning machinery, appliances for grading and separating grain —in fact, a modern equipment. It is to be completed by May 1.

We are informed that J. H. Little, the veteran grain man of Yellow Springs, Ohio, in connection with Owen Stutsman, stock buyer of that place, has organized a stock company of farmers for the purpose of erecting a large flouring mill and grain elevator. The capacity of the elevator will be 25,000 bushels. J. H. Little will be president and general manager of the new company, and Owen Stutsman secretary.

The Interstate Elevator Company has been incorporated at Winona, Minn. The business is stated as "for the erection, purchasing, leasing, owning and operating and sale of elevators and warehouses," and the doing of a general grain business for itself or on commission "in selling, buying, cleaning and storing of grain, seeds of all kinds, flour, feed, lumber and building materials." The capital is $100,000, divided into 1,000 shares at $100 each. The highest amount of indebtedness permissible is $250,000. The incorporators are Charles Horton, W. P. Tearse, John R. Marfield and Robert E. Tearse. The government and management are vested in a board of directors to be elected annually. The president and vice-president are to be elected by the directors; the secretary and treasurer from the stockholders. The first Board of Directors are Charles Horton, W. P. Tearse, J. R. Marfield and Robert E. Tearse. The first officers are Charles Horton, president; W. P. Tearse, vice-president; John Marfield, secretary, and Robert E. Tearse, treasurer.

BOOK NOTICES.

EXPERIMENTS IN GRAIN GROWING.—The Illinois Agricultural Experiment Station has now ready for mailing bulletins Nos. 41 and 42, which treat of experiments in wheat and in oats during the preceding season together with data from similar experiments in previous years. The subjects treated are: In wheat: Effect of maturity on weight of grain, curing in the shade or in the sun, quantity of seed per acre, seeding at different dates, fertilizer experiments in Southern Illinois, and testing varieties.

In Oats:—Different rates of seeding, time of sowing, and testing varieties.

No. 42 treats of Indian corn and discusses the following subjects: Testing varieties, time of planting, thickness of planting, rotation compared with fertilizers, and variation in yield of neighboring plants.

These bulletins, as well as all others issued by the station, will be sent free of charge to any interested person in Illinois who will send his name and post-office to the Agricultural Experiment Station, Urbana, Ill.

CORN AND THE SORGHUMS.—The report of the Kansas State Board of Agriculture for the quarter ending March 31, 1896, is largely devoted to corn. It contains 232 pages of interesting and instructive matter. It is divided into three parts as follows: Part 1 treats of corn, its cultivation, handling, utilization, cost and values, more especially from a Kansas standpoint. Part 2 of the sorghums, their cultivation and value for grain and forage, estimated by Kansas growers and feeders. Part 3 is devoted to the proceedings of the board's twenty-fifth annual meeting. Copy can be obtained by sending 6 cents for postage to F. D. Coburn, secretary, Topeka, Kan.

Lambert Hamilton was caught stealing corn from a freight car at Chicago recently, and while trying to escape was shot and killed by the watchman. An accomplice of the thief escaped.

The bad hay that goes into the ends of a car will have to come out.

Where will the next meeting of the National Hay Association be held?

D. Granger has purchased the business of Joseph Beaudry, dealer in hay, etc., at Marlboro, Mass.

Closer attention paid to grading on the part of shippers would do away with much of the complaining against receivers.

Garrison Bros. of Fort Scott and Kansas City recently shipped from Hepler, Kan., a car of hay consisting of 573 bales, or 46,920 pounds, to Illinois.

A bale of hay falling from a stack in A. Retan's feed store at Kansas City, Mo., overturned the stove. The fire which started was soon put out. Loss $110.

O. Torrison's hay building at Manitowoc, Wis., was destroyed by fire recently, together with a large quantity of baled hay. The loss amounted to $6,000, partially covered by insurance.

A receiver who wishes to retain the confidence of a shipper who entrusts his product to his care will make sure that the consignor is receiving credit for every pound the car contains.

Jas. M. Hillery, dealer in hay and feed at 562 W. Thirty-fourth street, New York City, assigned recently to Julius Silverman. Liabilities $18,207; nominal assets, $24,759; actual assets, $11,807.

W. A. Wheeler, formerly of the firm of Miller, Berthoff & Wheeler, dealers in hay, etc., at Jersey City, N. J., has opened an office in that city to carry on a commission business in hay and straw.

If the shipper desires to retain the confidence of the consignee and have his drafts paid at sight without hesitation, it is necessary for him to know that the car contains just the number of pounds invoiced.

The Hay Committee of the St. Louis Merchants' Exchange for 1896 is composed of the following members: D. W. Cliffton, J. E. Treasdale, T. R. Ballard, Christ Hilke, Henry W. Mack, F. W. Clemens.

William Tillotson, hay dealer of Adrian, Mich., has retired from the business for the present, and removed to Munson. Mr. Tillotson is a member of the Committee on Transportation and Car Service of the National Hay Association.

If there are any shippers who do not realize the importance of careful weighing of hay, let them consider what would happen if the receiver took balers' weights or estimated the weight of a car by the weight of a wagonload. It's a poor rule that won't work both ways.

The Northern Grain Co. of Ashland, Wis., is reported to be doing a very large hay business, shipping large quantities to Eastern and Southern states, including Ohio, Pennsylvania, Georgia, Florida, Alabama, Massachusetts, New York, Illinois and Indiana, averaging 100 cars per week. Several large shipments have been made to Tampa, Florida. The company has numerous shipping stations in Northwestern Wisconsin, and many large hay barns with a capacity of from 300 to 400 tons each.

Schedules of Frazee & Co., dealers in hay, straw, etc., at 601 West Thirty-third street, New York City, who assigned recently, show liabilities, direct, $50,070; contingent, $138,595; nominal assets, $122,-941; actual assets, $51,638. William Y. Frazee has individual liabilities, direct, $49,570; contingent, $10,507; nominal assets, $127,310; actual assets, $20,-544. It is said the company's difficulties chiefly arose from difficulty in collecting accounts. This firm was considered one of the best in New York, and at times received considerable hay from Canada.

It is rumored that there is to be another large hay warehouse erected in Kansas City soon, which will make four large warehouses with a capacity of about 150 cars each. Each year witnesses better facilities for handling the hay crop on this market, and its facilities will soon be unequaled. The hay business should be done through warehouses altogether, as the advantages to be gained are a great saving of time and expense in handling this product. Under the system of track sales hay many times must be resold, but with hay unloaded in warehouses and open for inspection of the buyer, he cannot reject it after purchasing. Then the railroads would gladly switch all cars to the warehouse free of charge in order to get the use of their cars immediately, thus doing away with that troublesome question of demurrage.—Haymaker.

Hay men seem to be waking up to the importance of local associations as a means of remedying local abuses in the trade. In this they are following in the wake of the grain men, as they lead the grain trade with a national association. No doubt hay dealers and receivers would be greatly benefited by local associations at least in all hay centers of any importance.

As the time for holding the annual convention of the National Hay Association draws near, many beneficial reforms that should be urged for the regulation of different phases of the hay business present themselves. The Haymaker suggests that if the Association would take up a few of the many troubles caused shippers by the unfair rulings of railroads, and by persistent efforts effect or cause to be effected more equitabe methods in the way of freight rates, demurrage and switching charges, it would prove that it had a purpose in the world and draw into its folds shippers from every section of the country, much quicker than can be done by less practical methods.

In urging the importance of considering the quality of hay, the New York Produce Exchange Reporter says that more care is taken by horse owners as to the quality of the oats than of the hay they purchase. Yet there is a greater difference between good and inferior hay than between the best and, say, third or fourth class oats. Hay varies greatly not only in the quality of the herbage of which it is composed, but in the condition under which it has been harvested, and in how it has been cured in the stack. Horses rarely suffer from eating bad oats, while much disease in the stable is attributable to the quality of the hay they consume. It has been estimated that about 50 per cent. of the cases of colic which occur in large stables are due to the hay with which the horses are provided. Owners of large studs frequently experience an outbreak of colic among their animals with the purchase and consumption of a fresh consignment of hay. Hay poor in quality and badly stacked is a most expensive fodder from the disease it frequently engenders, as well as from its low nutritive value.

HAY IMPORTS EXCEED EXPORTS.

According to the last report of the Bureau of Statistics hay aggregating 28,441 tons, valued at $271,-765, was imported in February, against 13,823 tons, valued at $92,169, imported in February, 1895; and in the eight months ending February 220,240 tons, valued at $1,960,648, was imported, against 119,740 tons, valued at $887,890, imported in the same time in 1894-95.

Of imported hay we exported none in February, 1896, or 1895, none in the eight months ending February, and we exported 45 tons, valued at $380, in the eight months ending February, 1895. Of domestic hay we exported 5,691 tons, valued at $82,086, in February, against 3,696 tons, valued at $52,106, exported in February, 1895; and in the eight months ending February we exported 36,478 tons, valued at $544,497, against 32,884 tons, valued at $489,420, exported in the same time in 1895-96.

ST. LOUIS RECEIVERS AND DEALERS.

There is war between two factions of hay handlers in St. Louis, Mo. It began with the feed dealers organizing the St. Louis Wholesale and Retail Feed Dealers' Association (of which H. W. Beck is president, and W. O. Andrews secretary), and presenting a circular to the commission men from whom they buy their feed, in which they said: "We earnestly and respectfully request that in future you will confine all of your sales of such merchandise as is usually denominated as feed to concerns carrying on the business of feed dealers, or in other words, to desist from selling to consumers of any kind, whose trade we feel should be given to the feed dealer and not to the receiver from whom we buy and who otherwise becomes our competitor." The circular was signed by the president, secretary and the 40 members.

The commission men say that the feed business has been in an unsatisfactory state for some time, and that country shippers have been loudly complaining. After the sale of a carload of hay, which is the principal commodity in the controversy, there has heretofore been no certainty of receiving returns, and rejections, they claim, have been frequent for trivial causes and delays in payment of bills sometimes went as long as three weeks. To be called upon under these circumstances to give up selling hay to such big customers as the several breweries, the St. Louis Transfer Co., the distillers and the big livery men, all members of the Merchants' Exchange, they consider a hardship.

About 60 commission men held a meeting and adopted rules governing the sale of feed, which they are asking the Exchange to adopt. These rules stipulate (1) that the buyer shall not have more than three days in which to examine hay purchased, and any failing to report reclamations in that time shall constitute acceptance. (2) That in case hay is not hauled by the buyer and actual weights reported in five days the seller shall have the privilage of collecting on account on the basis of the estimated weights shown by shippers' invoice or inweight of warehouse. (3) In case the hay is not removed and actual weights reported in ten days the seller shall have the right to make final returns to the shipper based on the same weights and the buyer to have no recourse on seller for shortage, but shall pay for any excess. (4) Payments to be made by buyer within four days after receipt of invoice, in accordance with these provisions. (5) When hay has been rejected a committee of five shall determine the value of it and the purchaser must accept it at the price so fixed. The members of the Exchange will vote on the question of adopting these rules.

The commission men said that they are in sympathy with the movement to elevate the standard of the feed business provided it did not discriminate against any reputable buyer, and expressed a willingness to discontinue selling to outsiders; but they practically refused to discontinue selling to carload buyers who were members of the Merchants' Exchange. They requested that all feed be purchased by the feed dealers in the open market, and that the dealers discontinue buying or receiving on consignment feed from country shippers. On the other hand the feed dealers are threatening openly to boycott the commission men who refuse to discontinue selling to consumers, no matter what their standing.

GRADING HAY AT KANSAS CITY.

A few country shippers are complaining because dealers grade their hay No. 1 here, and ship it to other markets for choice, claiming that they can do the same thing. There is no law on earth to prevent them, but there are complications that the country shipper never dreamed of, and his experience will likely cost him very dearly.

The commission man has an acquaintance with legitimate buyers and knows where he can place the hay to the best advantage. This knowledge can only come from long experience and a voluminous correspondence. The shipper in the country cannot possibly gain this experience and correspondence without much expense and trouble.

If the prices are not favorable at the home market the chances are that they will not be favorable at any other market unless it be some country point, for the reason that all the large hay centers move in sympathy with one another, hence the market closest to the country shipper will, as a rule, prove his best There are times, like those just passed through, when one section is very short on hay, that the above may not always apply, but ordinarily it will. We advise discontented shippers to try, for one season, supplying the trade direct and we believe they will be fully convinced that the old way is best.—Haymaker, Kansas City.

REVIEW OF CHICAGO HAY MARKET.

The prices for hay ruling in the Chicago market during the last four weeks, according to the Trade Bulletin, were as follows:

During the week ending March 21 the receipts of hay were 8,104 tons, against 7,423 tons the previous week; shipments 4,552 tons, against 3,880 tons for the previous week. A moderate business was transacted. The receipts were liberal and a fair inquiry existed on local account for choice grades of timothy and prairie hay. Poor and medium grades very dull and slow sale. Demand for shipment light; the Eastern markets were said to be well supplied, hence there was very light inquiry from that source. Prices without material change, though the feeling was easier. Sales of Choice Timothy ranged at $12.00@12.75; No. 1, $11.50@12.00; No. 2, $10.00@10.50; No. 3, $8.50@9.00; not graded, $8.00@9.50. Choice Prairie, $8.25@9.50; No. 1, $7.25@8.25; No. 2, $7.00@7.50; No. 3, $6.00@7.00. Rye straw sold at $6.00@6.50; wheat straw at $5.00@5.50, and oat straw at $5.00@5.50.

During the week ending March 28 the receipts were 8,586 tons, shipments 4,587 tons. A dull and dragging market was experienced. The arrivals were large and consisted mostly of coarse and off color hay. There was a fair local inquiry for strictly choice grades of timothy and Upland Prairie, with no material change to note in prices. Poor and off color hay was extremely dull. Demand light; local dealers wanted choice grades, and shippers were practically out of the market. Prices ruled weak, but not particularly lower. Sales of Choice Timothy ranged at $12.00@12.50; No. 1, $11.00@12.50; No. 2, $10.00@10.50; No. 3, $8.00@9.00; not graded, $7.50@11.00; No Grade, $7.00; Choice Prairie, $8.25@9.00, and fancy $9.50@9.75; No. 1, $7.50@8.25; No. 2, $7.00@7.50; No. 3, $6.50@7.00; No. 4, $6.00@6.50. Straw was in large supply and very dull. Rye straw sold at $5.50@6.50; wheat straw at $4.25@5.50, and oat straw at $5.00@5.50.

During the week ending April 4 the receipts were 7,835 tons, shipments 4,633 tons. The offerings of timothy hay were only moderate, and the local demand was quite good. Shipping inquiry light. A firm feeling prevailed with no particular change in prices. The arrivals of Upland Prairie Hay were smaller than for some time past, but the demand was also lighter, and a rather dull market was ex-

perienced. Strictly choice, bright hay was in moderate request and prices ruled steady. Low grades and off color hay about unsalable, with prices irregular, depending on quality and condition. Sales of Choice Timothy ranged at $12.00@12.75; No. 1, $11.50@12.00; No. 2, $10.00@10.75; No. 3, $7.00@10.00; not graded, $7.00@11.00; Choice Prairie, $8.25@9.50; No. 1, $7.00@8.00; No. 2, $7.00@7.50; No. 3, $6.25@7.00; No. 4, $6.00. Rye straw sold at $5.00 for off color and heating, and $5.75@6.50 for good to choice; wheat straw at $5.00, and oat straw at $4.00@5.50 for poor to choice.

During the week ending April 11 the receipts were 5,362 tons, shipments 4,144 tons. The market ruled dull during the early part of the week. The receipts were liberal and the demand was light, with no particular change in prices. Toward the close of the week the arrivals fell off, and the demand improved, both on local and shipping account. A firmer feeling prevailed and prices advanced slightly. Sales of Choice Timothy ranged at $12.25@13.00; No. 1, $11.50@13.00; No. 2, $10.00@12.00; No. 3, $8.50; not graded, $9.50@11.25; No Grade, $7.50; Choice Prairie, $8.50@9.50; No. 1, $7.50@8.75; No. 2, $7.00@7.50; No. 3, $6.50@7.00; No. 4, $6.00. Straw was in large supply and dull. Rye straw sold at $5.00@6.75; wheat straw at $5.00, and oat straw at $4.50@5.00.

NEW YORK HAY DEALERS ORGANIZE.

A meeting of the principal commission merchants who handle hay in New York, Brooklyn and Jersey City was held on March 11 in the New York Hay Exchange building, to devise means of remedying many abuses and evils that have grown up in the trade. It was especially desired to establish a credit system which would protect the commission men against overdrafts and the retailers against bad debts, and insure the prompt payment of bills incurred by consumers. Those present determined to organize an association, and elected the following officers: President, Chas. F. Swan; vice-president, L. S. Dillenback; secretary, A. Beaudrias; treasurer, Capt. Wm. Affleck.

At a later meeting the organization was perfected, and it was decided to change the name of the New York Hay Exchange, making it include dealers at other points in an enlarged membership.

Many important questions were discussed, including the availability and adoption of a change of time limits and a commercial rating that will have a tendency to largely disperse the feeling of uncertainty which has prevailed since the recent failures of good and reliable firms. It will endeavor to establish a bureau of information for the accommodation of members, so that dishonest or irresponsible shippers can be avoided. There will also be a readjustment of the present credit system proposed, and in this connection it is suggested that a reasonable limit of semi-monthly payments should be arranged.

Regarding the aims of the organization and prospects for the amelioration of present conditions, President Swan says: "We feel assured that with plans from clear-headed, experienced dealers and the more advantageous rulings we hope to effect with the roads in the matter of lighterage and other expenses which can be properly divided in the interest of receivers and distributors, we shall, with fair coöperation, soon be enabled to relieve the hay market of its lopsided discomfort."

SUIT FOR OVERCHARGES.

Attorney-General Moloney of Illinois has brought suit in the Superior Court against the Chicago, Rock Island & Pacific Railroad Company to collect a penalty of $5,000 alleged to be due the state from the defendant for overcharges in freight rates. The Attorney-General declares that on November 13 last the company transported for A. Reary of Henry, Ill., to Chicago, a carload of hogs. The car was delivered at the Union Stock Yards and Reary was made to pay $27.76 for freight. This sum was in excess, the plaintiff declares, of the legal rate from Henry to Chicago, the amount of the excess being $2.

The Attorney-General tells the court that statutes of 1871 and 1873, passed to prevent unjust discrimination by railroads, give the State Board of Railroad and Warehouse Commissioners power to fix upon a schedule of rates. In July last the Board adopted a schedule which was violated by the defendant railroad company in the case of Reary. The statutes provide a penalty of $5,000 to be collected by the state in case of such violations and the Attorney-General claims there is now due the people of the state that amount.

If the Attorney-General is sincere in his apparent effort to compel the rail carriers to heed the rates established by the State Board of Railroad and Warehouse Commissioners he can easily find many cases of overcharges which result in rank discrimination against both persons and places. The switching charge of $2 is collected for an extra service and from all shippers.

The standard bushel of the United States is 3 per cent. less than that of Great Britain.

The Exchanges

A recent sale of membership in the Chicago Board of Trade was for $790.

Tickets of membership to the New York Produce Exchange are quoted at $325.

We have received the eighth annual report of the Winnipeg Grain and Produce Exchange for the year 1895.

Under a resolution adopted by the directors of the Chicago Board of Trade, compilers of market reports on 'Change are absolutely prohibited from furnishing same to bucket shops.

At the annual auction sale of grain and flour tables at the Baltimore Corn and Flour Exchange, held April 7, 63 tables were sold for an aggregate sum of $329.25—nearly 50 per cent. less than last year.

The controversy at the St. Louis Merchants' Exchange over the rule making hard wheat deliverable on contract came to a head April 13 in a vote on the question of rescinding the rule. The vote was in favor of repealing the rule.

We are indebted to Secretary William Thurstone for a copy of the annual report of the Buffalo Merchants' Exchange for 1895. It includes full reports of all committees and statistics of the trade and commerce of Buffalo compiled by Mr. Thurstone.

Last year grain men of the Buffalo Merchants' Exchange succeeded in establishing a call board, which soon succumbed to the influences of a weak market. The question of maintaining a call board is now brought up again, and it is said that efforts will be made to reëstablish it.

Some years ago an effort was made to establish a life insurance association among members of the Montreal Corn Exchange, but the scheme fell through. The question has come up again among members of the Board of Trade of that city, and the feasibility of forming an association is being discussed.

The directors of the Superior Board of Trade have censured the Chandler-Hayes Grain Co. of that city for failure to settle account with a farmer of Mapleton, N. D., who made complaint that the company purchased from him last fall 3,000 bushels of barley and did not make satisfactory settlement. It is said that the directors will insist upon a settlement.

The special grain committee of the New York Produce Exchange has reported to the board of managers that it has been unable to get any concessions in the matter of differential rates from the Joint Traffic Association. It asks permission to employ counsel to fight the railroad pool before the legislature and the Interstate Commerce Commission.

A year ago some Chicago Board of Trade men advanced $15,305 to drouth sufferers in Eastern Nebraska and Western Kansas to enable them to buy seed grain. Recently $6,122 was placed in the hands of Assistant Secretary Worthington as a first installment toward repaying the loan. The 140 subscribers to the loan, who little expected to see any of it again, receive a dividend of 40 per cent.

The Wheat Committee of the Baltimore Corn and Flour Exchange has established a new grade of wheat to be known as No. 2 Red Winter Western, which shall be free from garlic. Heretofore there has been no distinction between wheat mixed with and free from garlic, and as a result there has been more or less complaint on the part of foreign buyers. The establishment of the new grade will compel the elevators to separate the two kinds.

The following officers were elected at the annual election at the Chamber of Commerce of Milwaukee, April 7: President, Cassius M. Paine; vice-presidents, David Vance and A. G. Bodden; secretary and treasurer, W. J. Langson; directors, Charles Best, J. A. Perkins and O. Z. Bartlett; board of arbitration, S. H. Seaman, George W. Goes, G. H. D. Johnson, Robert Hill and S. G. Courteen; board of appeals, C. S. Ilsley, John Foley Jr., C. P. Jones, Oscar Mohr and James McAlpine. Frank D. Hinkley was chosen grain inspector, and F. F. Clapp, weigher.

A committee appointed by the directors of the St. Louis Merchants' Exchange recently held a conference with the Board of Warehouse Commissioners to determine as to a means of solving the vexed question of allowing the delivery of No. 2 Winter on certificates calling for No. 2 Red Wheat. The committee recommended that all wheat graded under a standard grade be pure of its kind, and that in case of any appreciable mixture of other wheat the grading be classed as "mixed wheat." Also that the inspectors be required to specify the predominating kinds of wheat in the mixture as "red winter mixed with hard," or "hard winter mixed with red or spring," etc., so that the mixing of wheat as now practiced in parts of the state could be prevented. The committee also requested that all wheat arriving at St. Louis be inspected before being placed in elevators, regardless of any previous inspection in any other part of the state. The Board issued an order to this effect.

The squabble over the New York Produce Exchange Gratuity Fund has been settled by the amendments being adopted on a ballot taken recently. The amendments provide that should the fund be reduced to $750,000 there shall be thereafter no limit to the number of payments on each membership under the by-laws, except that when the fund shall be in excess of said amount to an extent sufficient to pay a death claim the excess of such fund over $750,000 shall be applied to the payment of death claims, and for the death claims so paid no assessments shall be levied on the membership. The remaining half of the yearly surplus income of the Exchange for five fiscal years ending May 1, 1901, shall be paid annually into the Gratuity Fund.

Items from Abroad

Net imports of wheat (flour estimated as wheat) into France during February amounted to 1,045,000 quarters (of 480 pounds each), against 1,716,000 quarters imported in February, 1895, and 5,505,000 in February, 1894.

During the months of January and February Sweden imported 45,000 quarters wheat (of 480 pounds each), and 7,000 sacks flour. The net imports of the two articles in the seven months ending January was 356,000 quarters, compared with 684,000 quarters in the corresponding period last season.

William Goodwin, writing from Buenos Ayres on February 29, says there is no doubt that the wheat crop is turning out very short, and the export surplus may possibly be no more than half of the 4,600,000 quarters shipped in 1895. He repeats that quality is good, and this at first disposed people to think well of the crop.

Imports of grain into Germany from Aug. 1, 1895, to Jan. 31, 1896, compared with the same time of preceding season were as follows: Wheat, 3,343,500, against 3,017,000 quarters (of 480 pounds); rye, 2,283,000, against 1,968,000 quarters (of 480 pounds each); barley, 2,814,000, against 3,814,000 quarters (of 400 pounds each); oats, 755,500, against 1,160,000 quarters (of 304 pounds each); corn, 1,058,500 against 652,000 quarters (of 480 pounds each). Exports during the same period were: Wheat, 197,500, against 286,000 quarters; rye, 76,500, against 159,000 quarters; barley, 248,000, against 117,000 quarters; oats, 167,500, against 198,000 quarters; corn, 132, against 64 quarters.

The Englishman of Calcutta on February 26 published an article upon the "Coming Scarcity in the Northwest," in which it said that the wheat crop, on the most favorable of computations, will not be half an average on the best black soils, while on the inferior soils and on the unirrigated land there will be no produce at all. Grain stocks are low; part of the surplus was expended on a double sowing, owing to the failure of the first seed sown. There are in the Northwest provinces all the elements of a most disastrous famine. To add to the troubles, we learn from a correspondent at Bombay of the Corn Trade News (March 7) that the whole of the Northwest is simply reeking with the fell disease, smallpox.

HEATING OF CORN SHIPPED VIA GULF PORTS.

The diversion of shipments of corn to the gulf ports, which has been such a feature in the winter grain trade and which has been made possible by the action of the railways, may be less satisfactory to the people interested in it than would appear at first sight. The shipments by way of New Orleans and Galveston have been unusually heavy, and have been largely of the new crop corn, as supplies of old corn have been scanty. Receivers at Chicago have been unable to compete successfully for business, and they may take some satisfaction in knowing that a great deal of corn taken out South has reached Liverpool in bad condition. A great deal of business has been done at St. Louis on "guaranteed to arrive" terms, which has resulted in material losses to the shippers. The shipment of much of the new corn even for northern ports has been looked upon by conservative shippers as rather a doubtful undertaking, to say nothing of the greater possibilities of damage in heating on the southern trip.—Chicago Tribune.

As the foregoing is the only report of corn shipped via gulf ports arriving in bad condition we are not disposed to credit it. The corn of the crop of 1895 was drier at harvest time than any crop harvested in years, and it is not at all likely that any of it arrived in Europe in bad condition unless it was wet in transit.

Fires - Casualties

W. C. McCormick's granary at Uniontown, Pa., was destroyed by fire March 13.

J. F. Bartow, grain dealer of Plankington, S. D., sustained a loss by fire recently.

The Nebraska City Cereal Milling Co.'s elevator at Hamburg, Iowa, was destroyed by fire March 23.

The Royal elevator at Wichita, Kan., was recently destroyed by fire. Loss $10,000; fully insured.

W. L. Simmons & Co., grain dealers of Itasca, Texas, recently sustained a loss by fire of $2,000; insured.

O. H. Meeker, dealer in grain, etc., at Danbury, Conn., recently sustained a loss by fire amounting to $25,000.

J. W. Andrews, grain dealer of Putnam, Conn., sustained a loss by fire recently. He carried insurance.

The Bamberg Alliance Warehouse Co. of Bamburg, S. C., recently sustained a loss by fire estimated at $50,000. Insurance $32,000.

Whalen & Co.'s elevator at Warner, S. D., was burned early on the morning of March 31. Loss about $5,000; partially insured.

A. E. West's elevator at Aurora, S. D., was recently destroyed by fire, together with 6,000 bushels of grain. Loss $3,600; insurance $2,200.

The Santa Fe elevator at Winfield, Kan., which had a capacity of 200,000 bushels, was destroyed recently. Loss $75,000; insurance $25,500.

Pickering Bros'. elevator at Shenandoah, Iowa, was destroyed by fire March 21, together with a quantity of grain. Total loss $7,000; insurance $4,000.

The warehouse and distillery of Millovitch, Fletcher & Co., Cincinnati, Ohio, was recently damaged by fire, entailing a loss of $200,000; fully insured.

The elevator at Chatfield, Minn., belonging to Parsons Bros. of Dodge Center, was destroyed by fire March 17, together with 3,500 bushels of grain. Loss $3,500; insured.

Woodworth & Co.'s elevator at Belle Plaine, Minn., was burned March 26, together with 4,000 bushels of wheat. It is supposed that an incendiary set fire to the building.

The ruins of elevator A2 at Minneapolis, Minn., broke into a blaze March 17, two weeks after the first fire. It was extinguished without material damage being done.

An elevator at Arlington, Ohio, caught fire from a spark from a passing locomotive March 19, and the upper portion of the building was destroyed and a quantity of grain damaged.

McCaull, Webster & Co.'s elevator at Warner, S. D., was destroyed by fire March 31, together with 2,000 bushels of wheat and a quantity of coal. Loss $5,000; fully insured. Incendiarism is charged

Elevator "A" at Burlington, Iowa, which belonged to the National Linseed Oil Co., was destroyed by fire March 29, together with 30,000 bushels of flaxseed. Loss on stock $30,000, insurance $27,500; loss on building $10,000, insurance $6,000.

Smith & Pierce's new elevator at Effingham, Kan., was burned early on the morning of March 17. Loss on elevator $3,000; on grain, $1,800. This is the second time Smith & Pierce's elevator has burned in four months. Incendiarism is suspected.

A grain warehouse at Monroeville, Cal., belonging to the Sacramento Transportation Co. was destroyed by fire recently, together with 6,000 sacks of wheat. Total loss, $15,000. The building was insured for $1,200 and the grain for $7,200. The origin of the fire is unknown.

Two large boilers in the Planters' Oil Mill at Greenville, Miss., exploded April 1, killing five workmen and injuring six others, some fatally. A fire started in the ruins, but was extinguished. The cause of the explosion is said to have been a dry boiler. Loss $30,000; fully insured.

The American Preservers Co.'s elevator at Davenport, Iowa, was damaged by fire March 29, partially destroying 40,000 bushels corn and 15 cars of glucose feed belonging to the Davenport Sirup Refining Co. Loss on building $3,000; on stock $12,000. It was insured for $275,000, and the loss has been adjusted at 3 per cent.

M. C. Ott's elevator at Wilton, Iowa, was almost completely destroyed by fire at 2 o'clock a. m., March 20. There were stored in the elevator 15,000 bushels of oats and 5,000 bushels of wheat, barley and rye. The fire is supposed to have originated on the roof, but the cause is unknown. Loss on building $6,000, insurance $2,500; loss on grain $6,000, insurance $4,000. Fire broke out again in the ruins the following day, but was extinguished without additional damage being done. The power plant was saved.

An incendiary set fire to William Siems' elevator at Melrose, Minn., March 29, but the fire was put out with little damage to the building. One of the spouts was found filled with waste soaked with kerosene. There was 9,000 bushels of wheat in the building, which was soaked with water. The building was insured, but the grain was not.

The North Western Elevator Co.'s elevator at Aberdeen, S. D., was destroyed by fire March 21. There was 7,500 bushels of wheat in the elevator, of which 3,500 bushels was sold for $300 and the remainder for $175. Loss $5,000; fully insured. The fire started in the power house, where horse power was employed. It is expected that if a good crop is anticipated the elevator will be rebuilt.

The National Linseed Oil Co.'s mill at Piqua, Ohio, was partially wrecked by the explosion of a 100-horse power boiler on the morning of April 6, just as preparations were being made to start up. The engineer and two others were injured, but no lives were lost. The loss is estimated at $50,000 to $70,000. Insured. Across the street from the mill was R. S. Lauson & Son's elevator, which sustained some damage.

Another most distressing accident has to be recorded, and it was one that could and should have been avoided. Fred Kinnaman, an employe in the Noblesville Milling Co.'s elevator at Noblesville, Ind., was working in the basement of the elevator on the afternoon of April 2 overlooking the machinery which operates the car puller. He was guiding the cable when his left hand was suddenly caught in the winding rope. He tried to release himself with his right hand, when that too was seized. He called for help and the machinery was almost immediately stopped, but not before both arms had been so badly crushed that they had to be amputated just below the elbow. Mr. Kinnaman is 35 years old, has a wife and two children, and was dependent on his labor for a living.

STEAMED CRUSHED BARLEY.

Under the management of W. F. Sperry, the Chico mill has introduced a new process of crushing barley, which is known as "steaming." Farmers, and, in fact, all who feed barley to their horses, have endeavored to find some way of having their barley crushed by a process that would do away with the powdering of the grain.

Just before the grain reaches the crusher, it is well steamed, and although it is thoroughly crushed, there is none of the powdering that is always found in barley that is crushed in the old way. Many farmers have tried the barley prepared by this new process, and pronounce it a decided success.—Enterprise, Chico, Cal.

TO EXTEND OUR FOREIGN TRADE IN GRAIN.

So many foreign countries have been discriminating against our grain and grain products, and in favor of those from other exporting countries, that a bill has finally been introduced in the lower house of Congress to provide for retaliatory discrimination against certain products imported from those countries by the United States, and for reciprocal trade treaties.

The bill, which was introduced by Congressman W. S. Kerr of Ohio, is House Bill 3212. Among other things it provides that,

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That if it shall at any time appear to the President of the United States that the government of any country producing and exporting the articles and products hereinafter enumerated imposes discriminating or prohibitory duties or other exactions upon grain, or the products of grain, or upon other agricultural products of the United States, he shall have the power, and it is hereby made his duty, to certify to the Secretary of the Treasury the fact of the imposition by such government of discriminating or prohibitory duties or other exactions upon grain, or the products of grain, or upon other agricultural products of the United States, and thereupon, and so long as such discriminating or prohibitory duties or exactions are maintained, the Secretary of the Treasury, in lieu of the duties provided by law upon the articles and products hereinafter enumerated, shall levy and collect discriminating duties upon the articles and products, the product of or exported from such foreign country into the United States."

The products enumerated include silks, velvets, webbings, laces, games, dolls, brandies and wines. The bill provides farther, that, "If the government of such country shall cease to impose such discriminating or prohibitory duties or exactions on the said products of the United States, the President may communicate such fact to the Secretary of the Treasury, and the Secretary of the Treasury shall thereupon cease to collect the discriminating duties by this section imposed on the products of or exported from such country into the United States, but the discriminating duties in this section provided for may be reimposed whenever and as often as the President shall deem proper under the power hereby conferred."

PERSONAL

Judge Andrew Thompson of Louisville, Ky., has been appointed grain inspector of that city.

Joseph Wiley has accepted the position of grain and live stock buyer for B. F. Marpin at Rolfe, Iowa.

A. B. Taylor, formerly in the grain business at Minneapolis, Minn., has removed to Knoxville, Tenn., on account of his health.

Emmett Porterfield has taken charge of M. F. Porterfield's elevator at Jamaica, near Fairmount, Ill.

W. B. Cassell of Lexington, Ky., has been appointed inspector and weigher of grain for Fayette County.

John Upschulte has been appointed assistant inspector in the State Grain Department at Kansas City, Mo.

In compliance with the request of grain dealers, J. M. Startzman of Savannah, Ill., has been appointed a state grain inspector for that city and Carroll County.

Alfred Hertz, one of the pioneer grain commission merchants of Kansas City, Mo., sailed from New York for Hamburg, Germany, April 9, to pay a visit to his native town.

E. P. Atchison, manager for years of Chambers & Price's grain warehouse at Kendrick, Idaho, has taken a similar position with the Garfield Grain & Elevator Co. of Garfield, Wash.

Wm. H. Stevens, for several years an extensive grain dealer of Portland, Me., has organized a company under the name of the Forest City Screw Driver Co. to manufacture a new tool of his invention.

Charles Reimer, an agent of the Northern Central Railway Co., has been advanced to the position of superintendent of elevator No. 2, at Calvert station, Baltimore, Md. Mr. Reimer is well-known in the trade and among the members of the Corn and Flour Exchange.

Geo. M. Lane, who has been the efficient secretary of the Detroit Board of Trade since 1885, resigned the office March 9. Mr. Lane had never been connected with the grain trade, but he was one of the best known officials of the Board of Trade. Mr. F. W. Waring, formerly assistant secretary, has taken up the duties of the secretary and is now acting secretary.

OBITUARY

B. L. Marfield, general manager of the Marfield Elevator Co. of Winona, Minn., died at Mankato March 29.

J. P. Thompson, the head of the firm of Thompson & Son, grain commission merchants of Navasota, Texas, died recently.

Geo. E. Sears Sr., the head of the firm of Geo. E. Sears & Son, commission grain merchants of New Orleans, La., died recently.

S. G. Rosekrans, an extensive wheat speculator on the Chicago Board of Trade, died suddenly at Orlando, Fla., March 31, of heart disease.

James R. Clark, of the firm of J. R. Clark & Co., wholesale dealers in flour at Baltimore Md., died March 29. He was a member of the Corn and Flour Exchange.

Ira Day, who for some years had been superintendent of the Northern Central Railroad's elevator No. 2 at Baltimore, Md., died March 12 of pneumonia, at the age of 62 years. Mr. Day was one of the best liked men connected with the trade at Baltimore, and was honored and respected by all who knew him. He was an active member of the Corn and Flour Exchange.

Chas. J. Rode, dealer in grain and feed at Chicago, disappeared from home March 16, and his whereabouts were not learned until his family heard that he had died at Sheboygan, Wis., April 2, having succumbed to an attack of pneumonia. It is thought that he left Chicago slightly demented. Mr. Rode had been in the grain and feed business at Chicago for 30 years, and was well known in the trade. He was born in Germany and was 58 years old.

CROP REPORTS

[Readers will confer a favor by sending us reports each month of the acreage and condition of growing crops, the amount of grain and hay in farmers' hands and stocks in store, for publication in this department.]

PENNSYLVANIA, Rushtown, Northumberland Co., March 24.—Wheat in this vicinity does not look very good on account of an open winter. A. H. GENNARIA.

MICHIGAN, White Pigeon, St. Joseph Co., April 9.—Rains to-day and last night have started both wheat and grass growing. Wheat in this section is all right; it is up to if not above the average. R. J. HAMILTON.

INDIAN TERRITORY, Ardmore, Chicasaw Nation, April 6.—Prospects for a wheat crop in this southern county are at present very flattering. We expect an excellent crop and good business. THOMAS & PLUMMER.

KENTUCKY, Winchester, Clark Co., April 11.—In this county about 80 per cent. of an average crop of wheat was sown, and about five per cent. of this will be plowed up and sown with other grain. That left standing now indicates about 60 per cent. of a crop. GOFF & BUSH.

MISSOURI, Linneus, Linn Co., April 10.—Farmers in this county report an average acreage of wheat sown, and a fair condition of the growing plant. There is considerable wheat in farmers' hands, but they are slow to sell until they see what the new crop is going to be. R. P. WATTS.

WINTER WHEAT.—The April crop report of the Orange Judd Farmer, based on estimates of county correspondence, makes the average condition of winter wheat 87, against 85.3 last year, and 87.4 in 1894. Averages in the principal states are: Pennsylvania, 89; Ohio, 72; Michigan, 95; Indiana, 83; Illinois, 86; Missouri, 85; Kansas, 91, and California, 96. The improvement since December 1 amounts to two points.

OHIO.—April 1 J. F. Zahm & Co. issued a report on the condition of winter wheat in Ohio compiled from 396 reports, covering every county of the state. Fifty-one reported that condition indicates an average crop; 101 condition indicates less than an average crop; 61 condition indicates a poor crop; 30 condition indicates a very poor crop; 91 condition indicates half a crop; 62 condition indicates less than half a crop.

MISSOURI.—The monthly crop report of the State Board of Agriculture issued April 6, shows condition of wheat compared with average, 77 per cent.; per cent. of wheat likely to be plowed up this spring, 10 per cent. Condition of rye compared with average, 87 per cent. Acreage of oats in the state compared with 1895, 96 per cent.; condition of the ground for seeding oats, 94 per cent. Condition of clover, 84 per cent.

INDIANA, Crawfordsville, April 10.—The facts in regard to the conditions are: The early sown wheat has gone through the winter in good condition and is doing well. As is usual, the late sown wheat did not show much growth and as we have had a few days of dry windy weather, it does not show up very well; still we think the roots are all right and to-day we are having a good fall of snow, probably 6 inches, that is excellent for the wheat. CRABBS & REYNOLDS.

KANSAS, Spearville, Ford Co., April 11.—The acreage of wheat in this vicinity is large, the crop is in good condition. The plant is strong and growing. We have had very little rain this spring and the ground is getting dry; we should have rain by April 15 to prevent damage to the crop. There is very little wheat here held by farmers; perhaps five or six cars of milling wheat subject to this market. There is a fair acreage of rye, and the plant is in good condition. H. W. DORSETT.

MISSOURI, Mount Vernon, Lawrence Co., April 11.—The wheat acreage is about the same as last year; the condition not so good. About half the acreage is good, one-fourth fair, and the balance very poor. I would make the average about 75, as compared with 90 last year. During the last ten days a wonderful improvement has taken place, and with very favorable weather it is possible that we may have a crop equal to the last one. One-fourth of last year's crop remains in farmers' hands. J. A. MILLER.

KENTUCKY, Louisville, April 7.—The Kentucky official crop report shows that during the early part of the week showers occurred in many sections, and were especially frequent and heavy in the western and southern portions of the state, many correspondents reporting the heaviest rains experienced in years. During the last half of the week there was an abundance of sunshine, but the minimum temperatures were low for the season and resulted in frosts, from which, however, no damage is reported, except to young clover, which in many counties suffered quite seriously. The condition of wheat is variously reported as being from poor to fair, some few correspondents stating that it is very good. Generally speaking, it is rather thin and uneven and lacks vigor of growth. The general opinion of correspondents, however, is that it has materially improved during the past week, and that with favorable weather from now on it will soon attain its normal condition.

ILLINOIS, Paxton, Ford Co., April 10.—The oats are all sown in this vicinity. The ground is in splendid condition, and we have just had a rain and snow storm which has thoroughly moistened the ground, and the plants will come up nicely. The oats crop was very light here last year, averaging less than 20 bushels to the acre; hence the amount in farmers' and dealers' hands is light. The acreage of oats is usually about the same as corn, but this year it is somewhat less. There was a large crop of corn raised here last year of excellent quality, and the most of it is in farmers' hands yet. They are very reluctant to sell on account of the low price. H. C. HALL.

OHIO, Lebanon, Warren Co., April 9.—The outlook for wheat in this section is very discouraging. Sun and showers have not started the plant as was hoped, and a very large proportion of the wheat seems beyond remedy. I regard the prospect as the poorest in many years. Owing to continued dry weather last fall a smaller acreage than usual was sown, and a great deal of that very late getting there. There has therefore been no start at all, or a very poor one. The winter seems to have finished it, and now a great deal will be resown in oats, which promises to be an unusually large acreage. Probably 15 per cent. of last year's wheat remains in farmers' hands, but there is very little disposition to sell it, and a large part of it will be carried over. Oats are pretty well sold up, but there is plenty of corn back. L. SIMONTON.

IOWA, Des Moines, April 7.—The monthly report of the Iowa weather and crop service bureau says: The last winter was milder than the average, with less than the normal amount of precipitation and stormy weather, making favorable conditions for wintering stock. March was abnormally cool and dry, with frequent dust storms. The season is somewhat late compared with the average of recent years. But a fair start has been made in seeding and preparing ground for planting. In the southern districts seeding small grain is about completed. In the central and northern districts sowing spring wheat is nearly completed, with a small increase of acreage compared with last year, and considerable progress has been made in sowing other small grain. The soil is in fine condition for working and for the reception of seed, with sufficient moisture to start vegetation. While the subsoil is extremely dry, there is more moisture at the surface than at the corresponding date last year. Fall wheat and rye wintered fairly well, but were somewhat injured by the high winds and freezing weather of the past week.

GOVERNMENT CROP REPORT.—The United States Department of Agriculture report on condition of winter grain April 1, 1896, shows: The consolidated reports from township, county and state correspondents show a condition of winter wheat in nine leading states as follows: Pennsylvania, 64; Ohio, 56; Michigan, 82; Indiana, 77; Kentucky, 70; Illinois, 81; Missouri, 75; Kansas, 88; California, 91; average for the entire country, 77.1; last year, 81.4, and 86.7 in 1894. The condition of rye was, in New York, 91; Pennsylvania, 86; Wisconsin, 77; average for the entire country, 82.9. Dry weather at seeding time, from which scarcely a county was exempt, largely retarded or prevented germination. Throughout the winter grain producing region the winter covering of snow was exceptionally scanty; rye suffered in most states less than wheat. Drouth in early winter and alternate freezing and thawing afterward greatly injured the crop east of the Mississippi. In Nebraska, Kansas and westward there was less winter killing than usual owing to the mild season, and present conditions are reported favorable. Hessian fly reported in a very few counties along the Atlantic slope.

MICHIGAN.—In the Michigan crop report for April, issued April 8, Secretary of State Gardner stated that wheat in the fall made small growth, but the winter was not unfavorable and it suffered very little injury previous to about March 20. From that date to the end of the month there was no covering of snow, and the freezing and thawing, usual in March, caused the fields to look brown and did considerable damage. Correspondents, however, at the time of making their reports, April 1, were hopeful that warm rains would give the plants a start and show them to be not greatly nor permanently damaged, but the warm rains do not come. Since the first of April the weather has been continuously dry, with cold winds from the north and northwest. Such weather cannot continue much longer without serious consequences. The condition of wheat now is more critical than at any previous time since sowing. The averages of correspondents' estimates, made April 1, are as follows, comparisons being with average years: Southern counties, 84 per cent.; central counties, 86 per cent.; northern counties, 92 per cent.; whole state, 86 per cent. One year ago the average condition in the state April 1 was 85 per cent., and in 1894 90 per cent. The average condition of clover meadows and pastures is: In the southern counties, 63 per cent.; central, 73; northern, 88; whole state, 69.

CALIFORNIA, Yuba City, Sutter County.—The Yuba City Farmer of recent date says: The grain fields never looked better, and from all parts of the county come reports of splendid prospects for a big crop, provided the balance of the spring months are favorable. One prominent farmer who has been over the county informed us a few days since that taking it all generally "there wasn't a poor field of grain in the county." The open winter gave ample opportunity for extensive seeding, and it looks now as though Sutter would make the biggest yield on record the coming season.

OHIO.—The April report of the Ohio Department of Agriculture indicates that the prospect for wheat as shown April 1 is extremely low throughout the entire state. The cause of low condition is attributed to the dry weather and unfavorable soil conditions at seeding time last fall, in consequence of which the plant did not get a proper start or become sufficiently set to withstand the winter and the freezing and thawing that occurred, especially during March. Many fields are bare and brown, and there is considerable that is thought to be dead, and that even the most favorable weather conditions cannot revive. Warm rains and sunshine during the present month will, no doubt, improve growth and vitality of much of the stunted wheat and increase the general condition or prospect, but it is evident at the present time that the best of weather conditions must prevail to secure any marked improvement. The percentage estimate of wheat condition April 1 as compared with an average is 57 per cent. Last year April 1 the condition was estimated at 82 per cent. The present range of condition throughout the state is from 40 per cent. the lowest, to 82 per cent. the highest. The lowest counties are through the central and southern portions of the state, and the highest in the northern portion where there was the greatest degree of snow protection. The tables will show that 13 counties range from 40 to 45 per cent; 7 from 45 to 50; 12 from 50 to 55; 14 from 55 to 60; 21 from 60 to 65; 14 from 65 to 70; 4 from 70 to 75; 3 from 75 to 82. Only seven counties, as will be observed, run 70 per cent. and above, while 20 counties run below 50 per cent. A great many wheat fields will be plowed up and put to other crops. The condition of barley and rye is also low, due to the same causes as those affecting the wheat prospect. Barley, 58; rye, 68. Clover has also come in for its share of the winter killing. Wheat in farmers' hands 20 per cent.

OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

A. E. Fenton, Amenia, N. D.
Theo. W. Herr, Denver, Colo.
Frank Kaucher, St. Joseph, Mo.
C. R. De Lamatyr, of Seeley, Son & Co., Fremont, Neb.
J. Silas Leas, of the Barnard & Leas Mfg. Co., Moline, Ill.
A. H. Nordyke, of the Nordyke & Marmon Co., Indianapolis, Ind.
M. L. Barbeau, Secretary of the S. Howes Co., Silver Creek, N. Y.
Paul Kersch, representative of the Schwitzer Metallic Mill System, Paris, France.
A. F. Shuler, Minneapolis, Minn., representative of Huntley Mfg. Co., Silver Creek, N. Y.

"WHAT DO THE X-RAYS SAY, BROTHER?"

—*From Zahm's Circular.*

WATERWAYS

The opening of navigation at Duluth and Superior is expected from April 26 to May 1.

The last winter cargo at Buffalo was unloaded into elevator the first week in April, and preparations were being made in the harbor for the opening of the lakes.

Three routes have been surveyed for the proposed canal connecting the Mississippi and Lake Superior. The report shows that the cost of such a waterway would range from $7,500,000 to $30,000,000.

It is said that 70 per cent. of the Chicago winter fleet has been chartered for grain. Nearly 8,000,000 bushels of grain has been loaded into boats during the winter. Nearly half of this is corn for Buffalo. There has been very little wheat moved, and not much oats. In all 103 vessels were loaded during the winter.

The new steel schooner Manda was loaded at the Bartlett-Frazier elevator at South Chicago April 6 with 163,000 bushels of corn, beating the record by 11,000 bushels. It is claimed that with 18 feet of water she will carry 264,000 bushels. If this is true the 20-foot channel is going to have some surprises for shippers.

The schooner Marcia recently loaded 136,000 bushels of wheat at Armour's A and B elevators at Chicago and remained at the dock stuck in the bottom of the Chicago River. Two powerful tugs failed to release her. Uncle Sam has millions for backwood bayous, swamps and creeks, but nothing for the improvement of the principal channels of commerce.

A cash offer of $2,000,000 has been made by a New York banking house representing a foreign syndicate for the privilege of running canal boats on the Erie Canal by electric traction. This bid is for the stock of the Erie Canal Traction Co. Contracts have been made for the construction of a cable way for the towing system from Tonawanda to Buffalo, a distance of 12 miles.

The Parliament of Canada has declared in favor of the proposed bridge over the Detroit River, thereby demonstrating that whatever damage might result to its water commerce would be but slight in comparison with the benefits incurred by Canadian railroads. On the side of the United States the opposite would be true, the very large river traffic suffering to the benefit of the railroads.

The British and Foreign Insurance Co. announce rates for this season which are about 50 per cent. higher than those of last year. They are as follows: All A1 steamers, value $75,000 and over, 22½ cents for season, without limit averages; all A1 steamers valued over $50,000 and under $75,000, and all A1 tow over $50,000 valuation, 30 cents for season, without limit averages; all A2 steam and sail vessels of all values, and all A1 steam or sail, valued less than $50,000, take the 60-cent rate, with 10 per cent. added for waiving of average.

No doubt the shipment of Manitoba grain via the St. Lawrence Canals will show an increase this season over last year, partly in response to efforts being made at Montreal, which will result in a consequent decrease of receipts at Buffalo. The Canadian Pacific Railway has announced that it will carry grain, flour, etc., to Montreal for furtherance to ports of call at the rates in effect at Boston for export, and the Grand Trunk has also announced lower rates on flour. But the Buffalo elevator pool still exacts ⅞ of a cent for transferring a bushel of grain.

The Canadian Parliament in refusing to extend for five years the time for completing the Chignecto Marine Railway has sealed the fate of that enterprise after a sum aggregating $3,500,000 had been expended. The scheme was to construct a line to transport vessels from Chignecto Bay across to the Northumberland straits. It had the usual great advantages that characterize all impossible schemes, and the Montreal Trade Bulletin says: It is difficult to determine who are the biggest fools—those who invested their capital in this maddest of mad schemes, or the government in encouraging and subsidizing it, although it must be admitted that the latter is greatly to blame in giving it any assistance at the start, as failure of the most emphatic nature was stamped upon it from its very inception.

A bill has been introduced in the United States Senate and House of Representatives to incorporate the Maritime Canal Company of North America with the object of connecting the Hudson River and the Great Lakes. The capital stock is to be $10,000,000, and a bond issue of $2,000,000 is provided for. The canal system for which the bill provides includes canals from the head of tidewater navigation on the Hudson to Lake Champlain; from the head of Lake St. Francis to the St. Lawrence River above the long Sault Rapids; from Lewiston, on the Niagara River, to a point on the river above the falls, and authority to deepen and widen the Champlain and Hudson Canal is asked. The channels are to be 20 feet deep to permit two of the largest vessels drawing 20 feet to pass. The scheme entirely ignores the Erie.

The discrimination against the boats of A2 class in the grain trade, which existed last season, has been removed by the Chicago Board of Marine Underwriters. For the coming season a sliding scale between boats of the different classes will be maintained. The Board has adopted the following rates: To Lake Erie and Georgian Bay, 40 cents; to Port Huron, Sarnia, 30 cents; to Lake Ontario and Ogdensburg, 55 cents; to Montreal, 70 cents. Grain on board boats of A2 class, excepting liners, will be charged 25 per cent. extra on the full going rate.

The question of a water route between Lake Winnipeg and Hudson Bay seems to be perennial with Manitobans. But the agitation of the scheme is going further this time, for a bill has been introduced in Parliament to grant a charter to a company organized for the purpose of constructing it. There has never been any actual investigation as to the feasibility of establishing such a waterway, but if there was wouldn't a favorable report be almost inevitable? The government has already spent millions on canals which are now in great need of improvement.

A supplement to a recent number of the Marine Record shows in diagram the fluctuations of the levels of Lakes Michigan and Huron from 1838 to 1895. This is a comparatively brief space of time in which to judge such a question as whether the water of the lakes is receding, yet the fluctuations are so great from year to year that if it is possible to control the levels commerce would greatly benefit by it. The diagram shows a fall from 1886 to 1895 somewhat similar to one from 1842 to 1847, and there is every reason to believe that a higher level will succeed the low water of 1895.

The total appropriation provided in the river and harbor bill, which has been passed by the House of Representatives, is $9,767,630, and contracts are authorized for amounts aggregating $51,000,000, the largest appropriation on record. Appropriations for Lake Michigan harbors include $75,000 for the Calumet at South Chicago, for the Chicago River $50,000, and authority to contract $650,000, for Milwaukee $168,737.91, and $7,000 for the maintenance of harbor. Lake Superior: Continuous contract involving expenditure of $3,080,553 for Superior and Duluth, and $50,000 for continuing the work on the harbors. Lake Ontario: Oswego $60,000, Ogdensburg $20,000. Lake Erie: Cleveland $1,354,000, Buffalo for work this season $100,000, and contracts authorized aggregating $2,200,000, Toledo $150,000. Also for improving Detroit River $30,000.

A committee of the Montreal Corn Exchange is considering means for the recovery of the export grain trade of the West, which, instead of going via the St. Lawrence and that port has been almost entirely diverted via the Erie route to New York. It is claimed that the deepening of the St. Lawrence canals would not be a solution of the question, for there is not sufficient Canadian tonnage to handle the export trade of Manitoba, and the law prohibits American bottoms from carrying from one Canadian port to another. The committee is considering whether it would not be well to allow American bottoms to carry grain from Ft. William to Kingston or Prescott rather than lose the trade. This would be very well for such vessels as can pass through the Welland Canal, but the large grain carriers would not be able to do that. The most needed reform seems to be the deepening of that waterway.

The insurance rates recently announced by the marine underwriters show marked advancement. Last year the agreed rate on steel steamers was 2¾ cents, but most of the business was done at 2⅝. The new rate is 3½. On wooden steamers of $100,000 valuation the new rate is 4¼, as compared with 3½ last year, with corresponding advances on boats of low valuation. On A1 steel sail vessels the rate is increased from 3½ to 4½, and on wood from 4½ to 5½ for $30,000 valuation, and better and to 6½ on boats of less than $30,000 valuation. Every spring sees a marked advance in insurance rates on the older wooden vessels. A2 steamers of a valuation between $50,000 and $75,000, which were insured last year at 5¼, will carry a rate this year of 7 per cent., and steamers of the same class with a valuation between $25,000 and $50,000, which were insured last year for 5¼, will now have a rate of 7¾. The same increase follows down the list of A2 steamers until a rate of 13 per cent. is reached on boats of less than $10,000 valuation.

Grain shippers of the Northwest are discussing the question of opening Canadian coasting trade to American vessels. In connection with this subject J. G. King, of the firm of Marks, King & Co., Port Arthur, has prepared some statistics showing that the total movement of Manitoba wheat by water during the season of 1895 was 12,210,309 bushels. Of the movement from Canadian ports, American vessels carried over four-tenths, or 4,606,686 bushels, to American ports, and Canadian vessels carried an additional small quantity to American ports, so that 6,700,623 bushels of Manitoba wheat went from Canadian ports to American ports for export. Of the whole quantity of Manitoba wheat shipped via Duluth, two-thirds, or 1,092,972 bushels, were carried by United States vessels, and only 591,455 by Canadian vessels. Thus of the whole quantity of Manitoba grain carried by water, amounting to 12,210,309 bushels, 5,699,658 bushels were carried by United States vessels, and probably all but a fraction of this amount went to United States ports to be shipped from New York and other ports to Great Britain, instead of from Montreal to Great Britain.

Court Decisions

Shipper Using Drover's Pass.

One who ships live stock, and undertakes, upon a drover's pass given him for that purpose, to accompany and care for his stock in transit, the supreme court of Nebraska holds, in the case of the Omaha & R. V. Ry. vs. Crow, 66 N. W. Rep. 21, does so under the implied conditions that he will submit to whatever inconveniences are necessarily incident to his undertaking, and is not, while accompanying his stock, entitled to all the rights and privileges of an ordinary passenger for hire.

Changing Route of Shipment.

When, in case of an unforeseen necessity, the safety of the shipment demands it, a deviation from the route agreed upon with the shipper may be made, and will be justifiable—as, for instance, forwarding perishable freight by rail, when a storm prevents a boat from proceeding upon its voyage; but, where the goods can be properly cared for and held until the shipper can be communicated with, the carrier will not be justified in selecting another route without notice to him and instructions from him.

Speculation in Grain Purchases.

Where the seller of grain does not intend to deliver the property sold, but simply to settle the difference in price, the transaction, under the laws of Missouri, is illegal, whether his brokers and the purchaser knew of his intention or not. And margins lost by such speculation in the rise or fall of the price of grain cannot be recovered back, under the law regarding recovery for losses in gaming, because they were not lost "at any game or gambling device," within the meaning of the statute.—Connor vs. Black (Supreme Ct. Mo.) 33 S. W. Reporter, 783.

Failure to Furnish Cars.

The liability of a common carrier of freight for a failure to furnish sufficient accommodation for the transportation of such property as it may be legally called upon to carry, the supreme court of Arkansas says (Little Rock & Ft. S. Ry Co. vs. Conatser, 33 S. W. 1057) attaches only in favor of those who come, or offer to come, into contractual relation with the carrier as shippers. For example, in order to hold a railway company liable for damages growing out of the failure to ship a specific lot of cotton, the court holds that it must be made to appear that the contractual relation of shipper and carrier existed, or was sought to be established, with reference to that particular cotton, and it is not enough to prove that the company had failed to furnish transportation for cotton, and this cotton was on hand at the time. Furthermore, the court holds that no action lies against a common carrier, for failure to furnish transportation, on behalf of a party who did not himself intend to ship, but intended to sell at the home market and was damaged in failing to sell because the buyers would not buy on account of not being able to ship.

Insurance by Common Carrier—Complaint.

In an action upon a contract by defendant to insure the plaintiff, a common carrier, to the extent of its liability as such, for loss by fire on grain in its elevator at its terminal station, the complaint set out the contract, also a common law contract of carriage of the grain of certain shippers, with the obligation to safely deliver it at such station to the connecting carrier, and that, while it was awaiting in such elevator such delivery in the usual course of its carriage, the grain was lost by fire, and that the plaintiff had paid the shippers therefor, but did not, in express terms, allege that the fire was due to the negligence of the plaintiff. Held, that the complaint stated a cause of action.

The answer alleged that the contract of carriage was evidenced by bill of lading containing stipulations modifying the plaintiff's common-law liability, and that the fire was not due to its negligence. The reply admitted the bill of lading, and affirmatively alleged that the fire was caused by plaintiff's negligence. Held, that the reply was not a departure in pleading.

A carrier may lawfully insure against liability for loss of goods carried, though occasioned by the negligence of its own servants.—Minneapolis, St. P. & S. S. M. Ry. Co. vs. Home Ins. Co. (Minn. S. C.), 66 N. W. Rep. (Feb. 22, 1896), 132.

PRESS COMMENT

THE METRIC SYSTEM.

It is not to be expected that the Fifty-fourth Congress will do so sensible a thing as to adopt the report of the committee of the House on weights and measures and provide for the adoption of the metric system. Should it do it and thus relieve the country in time of our crazy-quilt system, if it may be called a system, matched only by our monetary mosaic, it will have done one thing at least to justify its existence. Neither our weights nor our measures have anything scientific in them. They seem, like Topsy, to "have just growed." They are neither symmetrical nor uniform. What constitutes a bushel in one state will be either more or less than a bushel in another.—St. Paul Globe.

THE BRITISH WHEAT TRADE.

The trade now finds itself armed with but two bows—America and Russia—as in former years; the supplementary weapons of Australasia, India and Argentina having partly failed. Eight or ten years ago when Western Europe depended mainly upon America and Russia for her supplies, her requirements were about one-half of what they are now, while prices ruled twice as high. The present situation is, indeed, a convincing proof of the fact that prices depend not only on supply and demand, but also upon currency conditions.—Liverpool Corn Trade News. It may be that the large stores of wheat at grain centers in this country, Canada and in Russia, together with the improved and reliable facilities for quickly transporting information and supplies to any part of the globe, has much to do with placing buyers at ease.

NOT GUIDED BY CROP REPORTS.

Assuming that the reports to the Agricultural Bureaus of Ohio, Indiana and Missouri, fairly represent present appearances, we do not confide in them as a guide to future results. If the reports had been made two months ago, the averages would have been as low. There has been no weather to change the conditions. March was a winter month this year. We are ready to admit the usual loss by winter vicissitudes, but no more, because there is nothing to prove it. It is a question, not of surface indications at all, but of life in the root, and we believe, therefore, that all the reports of wheat conditions so far printed are misleading and unreliable. The crop may be short, but there is absolutely nothing now to show it. The soil is better than average condition for growth when growing conditions occur. If the roots are alive they will grow.—Toledo Market Report.

HANDLING WHEAT FROM THE MINNEAPOLIS FIRE.

The grain damaged in the burning of elevator A2 at Minneapolis, Minn., on March 2 is being handled by Paine Bros. of Milwaukee, by whom it is being cleaned and made marketable. Paine Bros. are handling it on commission under the direction of G. W. Van Dusen & Co. It was at first intended to dispose of the wheat outright, and sealed bids were invited for the entire lot. Only three bids were made, which ranged from $25,000 to $130,000 for the damaged grain, which amounted to over 1,000,000 bushels. The bids were considered too low, and the insurance companies decided to dispose of the grain themselves.

The grain which G. W. Van Dusen & Co. had in the elevator has been valued at $534,117, and the Washburn-Crosby Co.'s at $123,719. Van Dusen & Co. had an insurance of $414,500, but on account of the salvage will be entitled to a sum sufficient to cover the loss. The Washburn-Crosby Co. was fully protected, with an insurance of $125,000. There are various estimates as to what the salvage will amount to, $175,000 being given as a conservative estimate. Van Dusen & Co. are offering the cleaned wheat at 50 cents per bushel. Except for a smell of smoke it is said to be equal to the best No. 1 Northern.

HOME SEEKERS' EXCURSIONS.

In order to give everyone an opportunity to see the Western country and enable the home seekers to secure a home in time to commence work for the season of 1896, the Chicago, Milwaukee & St. Paul Railway has arranged to run a series of four home seekers' excursions to various points in the West, Northwest and Southwest on the following dates: March 10, April 7 and 21 and May 5, at the low rate of two dollars more than one fare for the round trip. Tickets will be good for return on any Tuesday or Friday within 21 days from date of sale. For rates, time of trains and further details apply to any coupon ticket agent in the East or South, or address F. A. Miller, Assistant General Passenger Agent, Chicago, Ill.

THE MARKETS

[We will be pleased to publish under this head short reviews of the conditions ruling in the different markets. Copy must reach us by the morning of the 14th of each month.]

Grain Report of Shanks, Phillips & Co., Memphis, Tenn., April 11: WHEAT.—No report. CORN.—Is weak, but in fair demand. No. 2 White sells at 28 cents. No. 2 Mixed at 27 cents. OATS.—The market for oats is dull, though the prices are higher. No. 2 White sells at 22½@23¾ cents. No. 3 White at 21½ cents. No. 2 Mixed at 21 cents. No. 3 Mixed at 19½@20 cents. HAY.—Receipts of hay continue light, but the trade is generally dull, and no great amount wanted. Low grades are neglected, and the demand is principally for No. 1 Timothy. Choice Timothy sells at $15.00. No. 1 at $13.75@14.00. No. 2 at $11.25@11.75. Choice Clover Mixed at $14.25. No. 1 at $11.75@12.25. No. 2 at $9.00@9.50. Choice Kansas Prairie at $8.00. No. 1 at $7.00. No. 2 at $6.00. Choice Arkansas Prairie at $6.50.

Grain Report of Collins & Co., Cincinnati, April 11: There is greater activity in the demand for all cereals than has ruled for some time past. The liberal reserves still remaining in farmers hands (unable heretofore to find a satisfactory market owing to an indifferent demand that has existed), has caused the trade to carry but small stocks, and buying only as necessity demands. With the advent of the busy season in the country plowing and seeding, and the probabilities of a small movement of grain to market in the near future, is accountable for the desire to increase stocks to some extent, quickening the demand, which is reflected in little firmer prices ruling, and the present affords a better opportunity for shipping on the market and realizing expectation than at any period up to this time. WHEAT.—The demand is ruling fair, while the offerings remain exceedingly small. No. 2 Red at 74@74½ cents. No. 3 Red at 70@71 cents. No. 4 at 65@67 cents. CORN.—There has been a good local and comsumptive demand, but the higher prices ruling have a tendency to cause buyers to purchase a little more sparingly, but firm and active markets are more than likely to prevail during planting season. No. 2 Mixed, White and Yellow at 31½@32 cents. No. 3 at 30@30½ cents. EAR CORN.—The higher prices ruling are attracting larger arrivals but under a fair demand values continue to be well maintained. Choice Yellow at 33½@34 cents. Mixed at 32@33 cents, as to quality. White at 31@32 cents. OATS.—Small receipts have prevailed throughout the week and higher prices are obtained, while the demand is quite active, with offerings still small. The tendency is toward better prices and we advise prompt shipments while the market is firm and inquiry good. No. 2 White at 24@24½ cents. No. 3 White at 22½@23 cents. No. 2 Mixed at 22@22½ cents. No. 3 Mixed at 20½@21 cents. RYE—The inquiry is still small, with No. 2 quotable at 41@42 cents, and the market is steady. HAY.—Receipts for the week 1,308 tons, shipments 412 tons. For the corresponding week last year the receipts were 1,557 tons, and the shipments 1,927 tons. The undertone of the market is very firm and we anticipate an advance of from $0.50@1.00 a ton on the top grades of timothy during the ensuing five or six weeks, as the offerings at present are not equal to the current demand. Choice at $15.00@15.50. No. 1 at $14.50@15.00. No. 2 at $12.00@13.00. No. 3 at $10.00@11.00. No. 1 Clover at $12.00@12.50. No. 1 Clover Mixed at $12.00@13.00. Choice Upland Prairie at $10.00@10.50. No. 1 at $9.50@10.00. STRAW.—Is in good demand at $5.75@6.25, as to quality. MILLFEED.—Is barely steady at $10.50@11.00 for Bran and Middlings in bulk; including sacks $1.00 more per ton is charged.

Now is the time to organize a national association of grain dealers.

[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

SECOND-HAND GASOLINE ENGINE.

A second-hand Lewis Gasoline Engine for sale. Five actual horse power. Everything complete and in perfect order. Address

BAY CITY GRAIN CO., Bay City, Mich.

TRACK SCALE.

For sale, very cheap, a 34-foot Foresythe pattern track scale of 60,000 pounds' capacity. The two wooden track beams are new. For price and further information address

I. K. HOSTETTER, Osborn, Ohio.

GRAIN ELEVATOR FOR SALE.

Steam power grain elevator, on Chicago & Alton Railroad, in Missouri, for sale. Convenient to Chicago, St. Louis and Kansas City. Corn sheller, scales, office, etc., complete. Splendid grain country; finest corn crop this season ever known. Very healthy location. Now in operation and rented to good advantage. Address

ELEVATOR, Mt. Leonard, Mo.

INDIANA ELEVATOR.

Grain elevator in fine grain locality in Northwestern Indiana for sale. Gasoline power; corn sheller and cleaner. All new. Good reasons for selling. Price $2,000. Address

C. L. A., care "American Elevator and Grain Trade," Chicago, Ill.

GRAIN ELEVATOR FOR SALE.

Elevator 1¼ miles from court house, Chicago, for sale. Connected with all Western and Eastern railroads by switches on my own grounds. Frontage 191x167, also additional vacant ground next to elevator 85x167, in all 276 feet front. Capacity 690,000 bushels; 100-horse power Corliss Engine, dry kiln and all necessary machinery. Building in first-class condition. For further information address

OWNER, 16 Traders' Building, Chicago, Ill.

COLORADO MILL AND ELEVATOR.

First-class 300-barrel, 4-story and basement steam roller mill, brick dwelling, and 140,000-bushel splendid water power elevator at Fort Collins, Colo., for sale. Most northern city, best located, and largest wheat district in the state, especially desirable for extensive feed and local business, with very little competition to be feared for many years. Buildings all brick, metal roofed; fully equipped in best manner. Mill and elevator 110 feet apart; automatic conveyors between, and railroad switches to each; brick warehouse and office; engine and boiler house adjoins mill. All outside. Cost $100,000. Price $65,000; elevator $15,000; mill, dwelling, etc., $50,000, on easy terms. Only $5,000 cash required. Address

THEO. W. HERR, Ft. Collins, Colo.

IOWA MILLS AND ELEVATORS.

The administrators of the estate of J. J. Wilson, deceased, offer for sale the new Daisy Roller Mills, located at Algona, Iowa, capacity 125 barrels. New throughout one year ago. Steam power, steam heat. Up to date in every particular. Good exchange business and local trade for mill products. With this plant are elevators of 40,000 bushels' capacity, stock yards, line of coal sheds and three houses for employes. Also the Model Roller Mills located at Emmetsburg, Iowa, capacity 150 barrels. Steam power, steam heat. Large local and shipping trade fully established. No near competition. These properties are located in a good wheat section; shipping facilities from both Algona and Emmetsburg are unsurpassed. To close up the affairs of the estate either one or both of these properties will be sold at a great sacrifice. For particulars address

LENETTE W. BUTLER, administrator, Algona, Iowa.

[Copy for notices under this head should reach us by the 13th of the month to insure insertion in the issue for that month.]

POSITION WANTED.

I want a situation as foreman or manager in a grain elevator. Have had several years' experience in the handling, grading and mixing of grain and the running of elevator machinery. I understand bookkeeping and all the details pertaining to the business. First-class references. Address

B. J., care "American Elevator and Grain Trade," Chicago, Ill.

ELEVATOR FOR RENT.

Elevator in the best grain region of Illinois for rent. The best built and most complete house in this part of the state. Has ear corn and shelled grain dumps, office, scales, hopper scales, one run of French burrs, sheller and cleaner, 30-horse power engine, etc. Must be seen to be appreciated. Possession given June 1, 1896. Address

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Best Grades
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To Poultry Raisers.

The Complete Poultry Manual is a neat little work which is well worth reading by those interested in poultry, or by boys or girls who want to turn an honest penny. The price is only 25 cents. Sent postpaid on receipt of price. Address

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[We will not knowingly publish the advertisement of a bucket-shop keeper or irresponsible dealer.]

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Shipper of Wet Feed,

From Chicago, Milwaukee and La Crosse.

Particular attention paid to the shipments of mixed car lots.

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Will pay the highest prices for **Wet** and **Dried Brewers' Grains, Dried Distillers' Slops, Starch Feed, Damaged Wheat, Hominy Feed** and **Barley Sprouts** under yearly contracts
Write for estimates F. O. B. cars your city.

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Consignments Solicited.

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ROOMS 7 AND 9 CHAMBER OF COMMERCE,

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High grades of Clover, Alsike and Timothy Seed a Specialty.
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Storage capacity 8,000 bales, 30,000 bushels.
Let us know what you have to offer.

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Corrugated Iron Roofing and Siding

Material Only or put on Complete.

Special pains are taken to get out these materials so they can be cheaply put on and make a good job.

DURABLE—EASILY APPLIED.

This roofing is manufactured from natural Trinidad asphalt materials, and will not dry up and become brittle under exposure to the weather as coaltar roofings do. ☞ *Send for free sample of roof, 12 years old, with circular and price list to*

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56 Fulton St., New York, U. S. A.

WE SEND

The American Miller

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ONE YEAR FOR $2.50.

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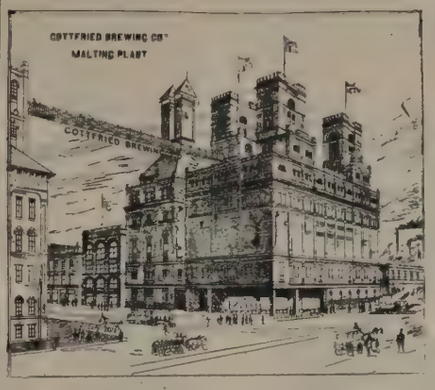

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Designers and Builders of

Elevators, Breweries, Malt Houses, Distilleries and Machinery.

. . . Patentee and maker of the Grain Dryer "America," Direct Supporting Cellar Construction, Steep-Tank and Mash-Tub Valves.

907-911 Schiller Building, Chicago.

Gutta Percha Roofing.

Absolutely fireproof paper sheathing—particularly adapted for elevators.

Wire Edge. Lock Joint.
For Flour, Grist Mills and Elevators.
VERMIN PROOF.
Send for illustrated catalogue.

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Telegraph Cipher and Directory,

Modern, Practical, Economical and Instructive.

The principal Flour, Grain and Feed Shippers are using this cipher. It has no equal. Send for partial list of users. **Price, $3.00.** Address **Henry Jennings,** 613 Chamber of Commerce, **Boston, Mass.**

DUST PROTECTOR.

The **"Perfection"** keeps poisonous dust out of the lungs. Of **great value** to everybody working in dust. **Handiest** and BEST APPEARING. **Nickel Plated** Protector, Postpaid, **$1.** Circulars **free.** Agents wanted. Address **H. S. COVER, South Bend, Ind.**

DUST! DUST!

Gibbs' Patent Dust Protector protects the nose and mouth from inhalations of poisonous dust; invaluable in **mills, elevators** and every industry where dust is troublesome. **Perfect** protection with **perfect** ventilation. Nickel-plated protectors $1, postpaid. Circulars **free.** Agents wanted.

Gibbs Respirator Co.,
30-36 La Salle Street, - CHICAGO.

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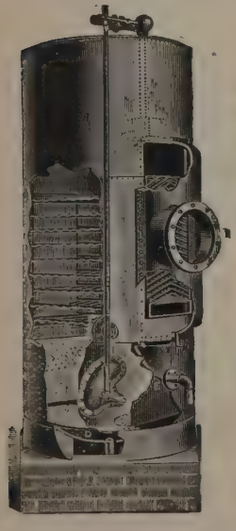
PATENT IMPROVED.



Lime Extracting Heater.
Uses Exhaust Steam.
Separates the oil from the Steam and Water.
It regulates the Feed.
The Pipes Never Pound.
Prevents Scale in Steam Boilers, Removing all Impurities from the Water Before it Enters the Boiler.

THOROUGHLY TESTED.

Over 4,500
OF THEM IN DAILY USE.

Illustrated Catalogue Free.

The Stilwell-Bierce & Smith-Vaile Co.,
DAYTON, OHIO.

THE ROBERT AITCHISON PERFORATED METAL CO.
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DO YOU NEED **The Best Feed Grinder on Earth,**

AT PRICES THAT DEFY COMPETITION?

. . . If so, write to . . .

CHAS. KAESTNER & CO.
ENGINES, BOILERS, PUMPS, POWER MACHINERY,
CHICAGO, - - ILL.

The American Cereal Co.,

MANUFACTURERS OF

OAT MEALS, FLOUR AND CEREAL PRODUCTS.

Akron, Ohio. 55-57 N. Moore St. | Chicago, Ill. New York City, 501 Cham. Com. | Cedar Rapids, Ia. Boston, Mass., Philadelphia, Pa., 5 S. Front St.

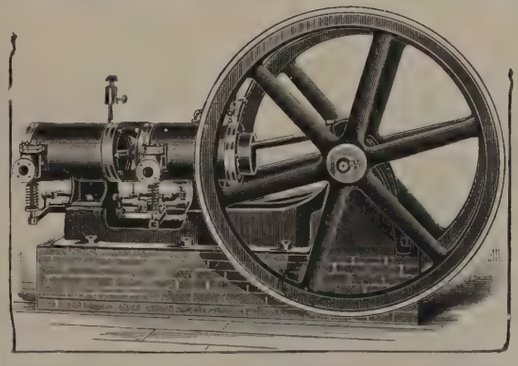
CHICAGO, ILL, August 1, 1895.

MESSRS. CHARLES KAESTNER & CO.,

Gentlemen:—Yours of the 30th received, and in reply would say that we have been using the Kaestner Mill for the past fifteen years. We think they are the best mill in the market. We have twelve of them in use at present. Yours truly, THE AMERICAN CEREAL CO.,
GEORGE STUART, Supt.

The Hicks Improved **GAS AND GASOLINE ENGINE.**

The long-sought for found.



An impulse at every revolution, using the Old Reliable Four Cycle Principle. This is the only first-class up-to-date Gas Engine on the market.

Send for Catalogue and Testimonials and be convinced.

PRICES REASONABLE.

THE DETROIT GAS ENGINE COMPANY,
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THE ALBERT DICKINSON CO.
Timothy, Clovers, Flax, Hungarian, Millets, Red Top, Blue Grass, Lawn Grass, Orchard Grass, Bird Seeds, Ensilage Corn, Pop Corn, Buckwheat, Field Peas, etc.
OFFICES, COR. CLARK & SIXTEENTH STS.. CHICAGO, ILL

THE CHANCE OF A LIFETIME.

Our business has grown to such a magnitude as to compel us to seek larger quarters. We have therefore decided to sell the Elevator and Hay House we now occupy. It is situated in one of the most convenient locations in Cincinnati for shipping and retailing purposes. Will sell at a bargain and allow liberal terms. For particulars address

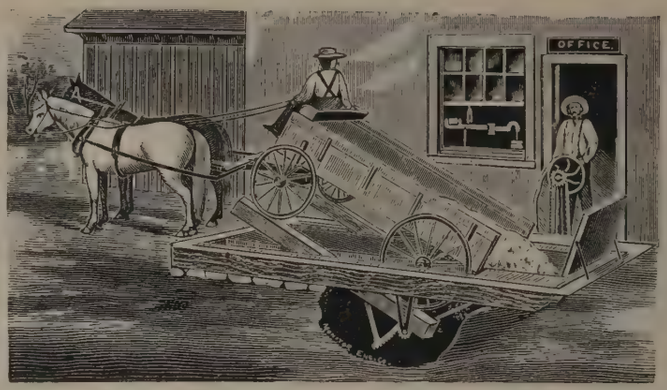
THE UNION GRAIN AND HAY CO., CINCINNATI, O.

The Bristol Counter

Registers an accurate account of work done on any machine, grain tallies, fraction tallies, 4, 5 and 6 figures. Send for circular.

C. J. ROOT, Bristol, Conn.

Gold Dollars



At FIFTY CENTS apiece are CHEAP, but they do not represent a better investment than we offer the "elevator and grain trade" in our

Controllable Wagon Dump.

WINCHESTER, ILL., February 4, 1896.

MESSRS. SAVAGE & LOVE CO., Rockford, Ill.

GENTLEMEN:—Your favor of the 28th ult. received and noted. Last July I put one of your Controllable Wagon Dumps in a Fairbanks, Morse & Co.'s 22-ft. scale, and it has given me entire satisfaction in every respect. In this locality the bulk of grain is as yet handled in sacks, and by tipping the Dump about one-half it makes a nice slant, making it very easy to pull the sacks to back end of wagon, where strings are cut and grain runs out into bin below. Every farmer, without exception, speaks in glowing terms of the merits of this Dump. In unloading loose grain from wagon there is no dump that will equal yours in being easily handled and always under control of operator. No scaring horses, no dropping of wagon and no noise. I consider a grain elevator incomplete without the Savage & Love Controllable Wagon Dumps.

Yours truly,
M. C. WOODWORTH.

MANUFACTURED ONLY BY

THE SAVAGE & LOVE CO., Rockford, Ill.

FAIRBANKS, MORSE & CO., St. Paul, Minn., Northwestern Agents.

J. B. ALLFREE MFG. CO.

INDIANAPOLIS, INDIANA.

BUILDERS OF

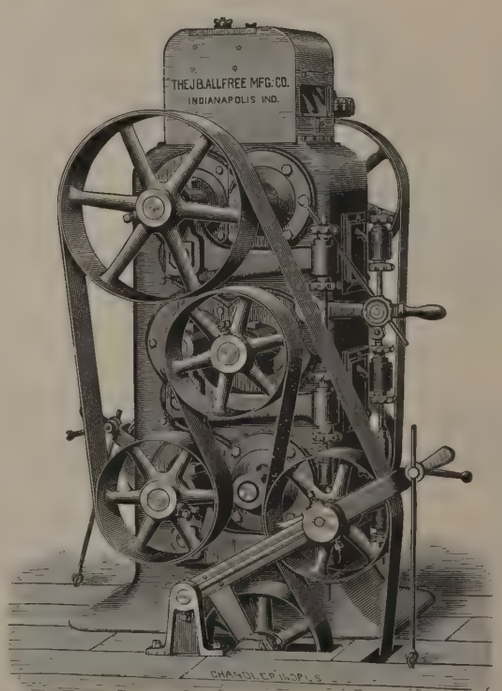
THE HIGH MILL SYSTEM,

An Improved Milling System,

Makes Better Flour, Saves Power, Room and Labor.

Corn Shellers,
Automatic Engines,
Cornmeal Plants.

Describe wants and write for Circulars.



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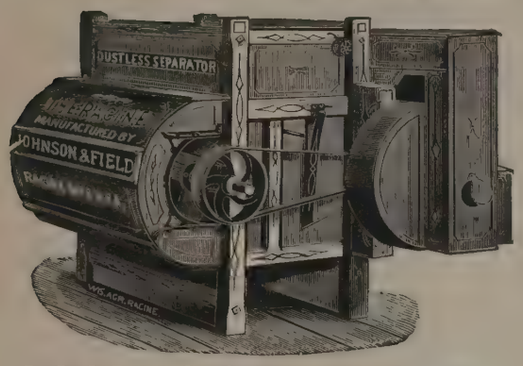
FLOUR-MILL and ELEVATOR MACHINERY.

Improved Rope Drives,
Shafting and Pulleys,
Corn and Feed Rolls,
Aspirating Meal Bolts,
Hominy Separators,
Grain Separators.

SPECIAL PRICES UPON APPLICATION.

"THE RACINE" DUSTLESS GRAIN SEPARATOR



Embodies More Points of Excellence

Than any other machine offered for similar purposes, and is **Light Running, Large in Capacity, Perfect in Separation** and with **Great Strength** and **Durability.** These machines have no equal. Adopted and indorsed by many of the largest Mills and Elevators in the country.

MADE IN DIFFERENT SIZES TO MEET DIFFERENT REQUIREMENTS.

THE RACINE HEAVY WAREHOUSE MILL

Is especially adapted for horse power use, is supplied with **Patent Governor Pulleys,** has an even and steady speed, is built extra heavy and bolted throughout. This machine has large capacity and is more durable than any other Warehouse Mill made.

Send for our catalogue and prices before placing your orders.

IMPROVED GASOLINE ENGINE. Oil and Steam Engines from 1 to 100 H. P.

Elevator Machinery and Supplies,

Scales, Warehouse Trucks, Elevator Boots, Buckets and Bolts, Pulleys, Shafting, Belting, Grain Spouts, Etc.

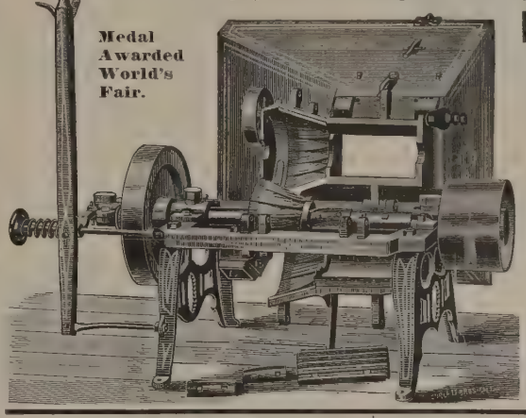
JOHNSON & FIELD COMPANY, - - RACINE, WIS.

THE BEST & CHEAPEST

MANUFACTURED BY
THE CHESAPEAKE BELTING C°
BALTIMORE, MD.

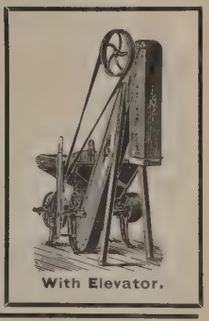
THE BEST ALL-AROUND FEED MILL.

The conical burrs give large capacity with moderate power. Ahead of rolls or burrs in speed and quality of work for grinding all kinds of grain into first-class feed. Will crush corn and cob, and grind oats, rye, barley, *wheat*, shelled corn, cotton seed, oil cake, etc. Has self-feeder for ear corn. The divided hopper makes it practical to grind oats, wheat or other small grain, and crush ear corn at the same time; *mixing* the two in any proportion desired. Are sold with or without elevator attachment; and are made in three sizes, ranging from 2 to 12 horse power. **Get my circular.**



Medal Awarded World's Fair.

N. P. BOWSHER,
South Bend, Ind.



With Elevator.

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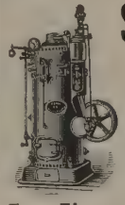

Steam Engines
And
Steel Boilers,

UPRIGHT AND HORIZONTAL,
From 3 H. P. up.

For Elevator and Mill Work.

Send for pamphlet and state your wants to

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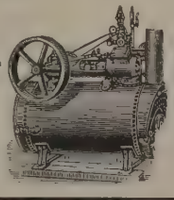

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Hay and Grain Record

Gives history of each car from date of purchase to final settlement. Profit and Loss quickly seen; arrangement perfect, and a great aid in your business, also checking up accounts. Try it and you will not do without. Every Shipper or Receiver, large or small, wants it. Copyrighted. . . . . .

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Trucks and Sack Holders.

Improved Trucks,

Combination Truck and Step-Ladder, and Single Trucks. **Sack Holders and Stand.**

Best Boiler Compound recipe, the right to manufacture and use, with instructions. Price..... $1.00

Combination Truck and Step-Ladder and Single Truck for..$5.00

Prices for larger number given. Write for prices and circulars. Circulars free.

PEERLESS MFG. CO., Springfield, Ohio.

PRICE REDUCED 66 PER CENT.

Cawker's American Flour Mill and Elevator Directory.

FORMER PRICE, $10.00. **PRESENT PRICE, $3.50.**

We have a limited number of Cawker's American Flour Mill and Elevator Directory for 1895-1896 on hand, which we will sell at $3.50 per copy. They will not last long at this price, so speak quick if you want one

We will furnish a copy of the Directory and a year's subscription to the AMERICAN ELEVATOR AND GRAIN TRADE for $4.50.

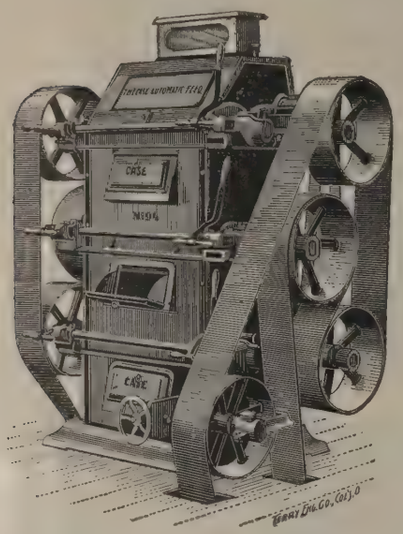
ADDRESS MITCHELL BROS. CO., 184 AND 186 DEARBORN STREET, CHICAGO, ILL.

Elevator Men,

Who put in a **ROLLER FEED MILL** last season, found it a profitable investment. Some Roller Feed Mills put in by elevator men have more than paid for themselves in one season. The demand for ground feed during the coming season promises to be even greater than during the last.

The Case Three-Pair High Corn and Feed Roller Mills

Are made in four sizes, and always do perfect work.



ONTARIO, IND., April 8, 1895.

The Case Manufacturing Co.,
Columbus, Ohio.

DEAR SIRS:—We have the 9x18 Three-High roll running, and it is the best Feed Roll that I ever handled or saw. We can grind 60 to 65 bushels per hour with less than half the power that we used with the old stone.

She is a daisy. We have smiles all over our faces like a full moon. Now, if you want a statement regarding the roll, let me know, and will write you a good one. Everything all O. K.

Yours respectfully,
M. S. MILLER.

We Keep a Full Line of

ELEVATOR AND MILL SUPPLIES AND MACHINERY.

Grain Cleaners, Corn Shellers, Corn Cleaners and Scourers.

CORN MEAL BOLTS.

WRITE US FOR PRICES BEFORE BUYING.

THE CASE MFG. CO., Columbus, Ohio.

THE SMITH PNEUMATIC TRANSFER AND STEEL STORAGE SYSTEM.

Now in Successful Operation at Toledo, Ohio.

This is an entirely new and complete system for handling, treating and storing grain, seeds, millstuff, coal, sand, gravel, salt and other subdivided substances which can be handled in bulk, and the protection and preservation of cereals, seeds, vegetables, fruits, ensilage and fodder crops, cotton, wool and other fibers, tobacco, provisions and all perishable substances and valuable commodities in absolute safety from fire, water, air, storms, floods, microbes, insects, vermin, animals, thieves, evaporation, fermentation, oxidation or other causes of damage or destruction.

This system has nothing in common with other methods, but is entirely different and distinct, in construction, arrangement and operation, materials used, principles involved, and results obtained, from all others heretofore in use.

It is fully protected by 20 patents already issued, and others pending, in the United States and principal foreign countries.

It was on exhibition at the World's Columbian Exposition of 1893, and was awarded four highest medals and diplomas and received in addition thereto the highest indorsement of the principal officers of the Exposition as well as of the highest authorities in all industries to which it is applicable.

The title to all patents and other rights belonging to this system is vested in The Smith Pneumatic Transfer & Storage Co., and any infringement thereon will receive prompt attention.

The policy of the Company in regard to the introduction of its system is to make such liberal and easy terms with all who desire to use it that there will be no cause for complaint.

Full particulars furnished on application in person or by letter to

The Smith Pneumatic Transfer & Storage Co.,

1327 Manhattan Building,

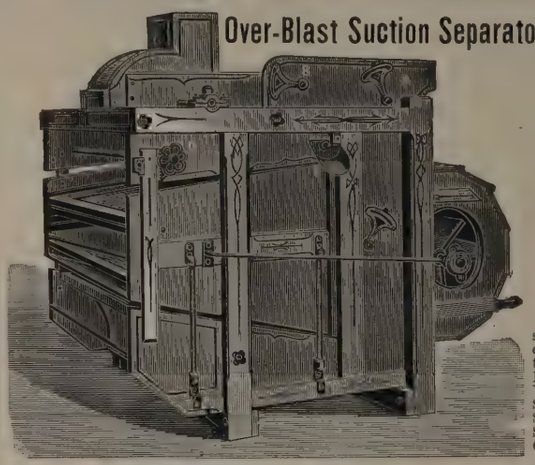
315 DEARBORN ST., CHICAGO.

THE CELEBRATED

A. P. DICKEY GIANT GRAIN CLEANERS.

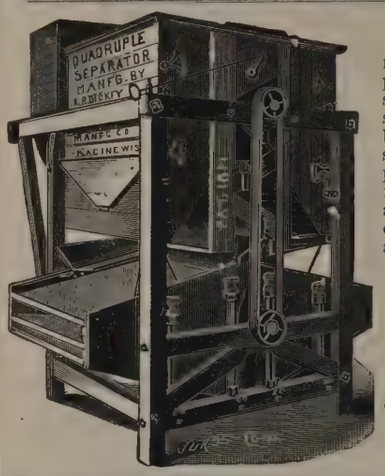
Over-Blast Suction Separator.

THE STANDARD IN THEIR LINE.



"Grain Cleaned to a Standstill."

Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over-Blast.



The Quadruple Suction Dustless Separator, Four separate suctions, independent of each other, with sieves and screens, requiring less power, less floor space, lower in height, needing less bracing, has better and more perfect separations, and furnished with the only perfect force feed and mixer on the market. Guaranteed to clean Grain to any desired standard without waste once through this machine twice as well as any machine made.

For CIRCULARS and PRICES address

A. P. Dickey Mfg. Co.

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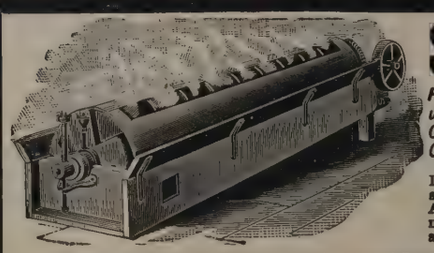
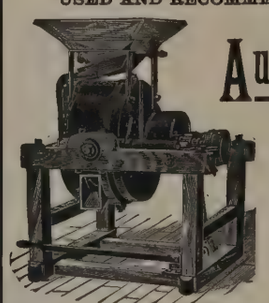


STEAM DRYER

For Cornmeal, Hominy, Buckwheat, Rice, and all kinds of Cereal Products; also Sand, Coal dust, etc.

Drying Cylinder made entirely of Iron. The machine has few parts and is not liable to get out of order. Automatic in its operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

USED AND RECOMMENDED BY LARGEST AND BEST MILLS.



Automatic Adjustment Mill.

The adjustment is positive and automatic, utilizing every part of the grinding surfaces. Can be started or stopped at pleasure, without stopping the power. Is dressed without taking the shaft out of its boxes, or the belt off the pulley.

Comprises all Recent Improvements for Producing Goods at Lowest Cost.

SEND FOR CIRCULAR.

THE CUTLER CO., North Wilbraham, Mass.

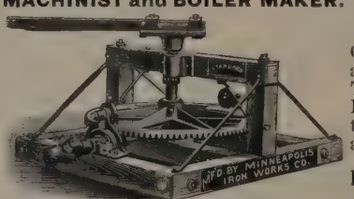
MINNEAPOLIS IRON WORKS,

D. M. GILMORE, Prop.,

MACHINIST and BOILER MAKER.

COMPLETE OUTFITS FOR

Grain Elevators,



Grain Elevator Machinery, Boxes, Hangers and Shafting, Elevator Buckets, Boot Tanks, Sprocket Wheels, the Standard Horse Power (single and double gear), Detachable Chains and Attachments, Wood and Iron Pulleys, etc., etc.

Repairs Receive Prompt Attention.

OFFICE 23 SECOND STREET NORTH
SHOPS AT 900 FOURTH STREET SOUTH

MINNEAPOLIS, MINN.

Only $2 For the Greatest Work Of the kind on Earth!

Do you Operate an Elevator or Flouring Mill?
Are you a Grain Buyer or Seller?
Are you a Grain Commission Merchant?
Are you a Track Buyer or Seller?

OR, DO YOU DESIRE TO REACH THIS CLASS OF CUSTOMERS?

☆ CLARK'S OFFICIAL ☆
Grain Dealers' and Shippers' Gazetteer

WHICH IS NOW READY FOR 1896.

It is handsomely and durably bound in fine silk cloth, with large side stamp, size 9x12 inches, 280 pages, and will be sent, express charges fully prepaid, for **Only $2.00**

This invaluable work has been issued under the endorsement and with co-operation of the Freight Departments of more than one hundred of the leading Railroad Systems throughout the United States. It contains the

OFFICIAL, CORRECTED, REVISED AND COMPARED LISTS

Of Elevators, Flouring Mills, Grain Dealers and Shippers, Track Buyers and Sellers, Commission Houses, etc., etc., on the Following Leading Systems:

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Chicago, Rock Island & Pacific Railway.
Chicago, Milwaukee & St. Paul Railway.
St. Louis, Iron Mountain & Southern Railway Co.

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Chicago, St. Paul, Minneapolis & Omaha Line.
Fremont, Elkhorn & Missouri Valley Line.
Sioux City & Pacific Line.

Louisville, New Albany & Chicago Ry. (Monon).
Baltimore & Ohio Railroad Co.
Chicago & Eastern Illinois.
Northern Pacific Railway.
Illinois Central.

Burlington System:
Chicago, Burlington & Quincy Railroad.
Chicago, Burlington & Northern Railroad.
St. Louis, Keokuk & North-Western Railroad.
Chicago, Burlington & Kansas City Railway.
Hannibal & St. Joseph ailroad.
Kansas City, St. Joseph & Council Bluffs Railroad.
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Cincinnati, Hamilton & Dayton Railway Co.
Missouri, Kansas & Texas Railway.

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Cincinnati, Saginaw & Mackinaw Railroad.
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Detroit, Grand Haven & Milwaukee Railway.
Toledo, Saginaw & Muskegon Railway.

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Fitchburg Railroad Co.
Maine Central Railway.
New York & New England Railroad Co.
Central Vermont Railroad.
St. Paul & Duluth Railroad Co.
The Baltimore & Ohio Southwestern Railway Co.
New York, Ontario & Western Railway Co.
Chicago & Alton Railway.
Minneapolis, St. Paul & Sault Ste. Marie Ry.
Union Pacific System.
The Great Northern Railway Co.
The Missouri Pacific Railway Co.

Erie System:
New York, Lake Erie & Western Railroad.
New York, Pennsylvania & Ohio Railroad.
Chicago & Erie Railroad.
Buffalo & Southwestern.
Tioga Railroad.

Pennsylvania System:
Pennsylvania Railroad Co.
Pittsburgh, Ft. Wayne & Chicago Railway.
Philadelphia, Wilmington & Baltimore R. R. Co.
Washington Southern Railway Co.
Baltimore & Potomac Railroad Co.
Northern Central Railway Co.
Camden & Atlantic Railroad Co.
West Jersey Railroad Co.

Panhandle Route:
Pittsburg, Cincinnati, Chicago & St. Louis Ry. Co.
Indianapolis & Vincennes Railroad Co.
Cincinnati & Muskingum Valley Railway.

Allegheny Valley Railroad.
Cumberland Valley Railroad.
New York, Philadelphia & Norfolk Railroad Co.

Michigan Central R. R.
C. C. C. & St. L. Railway (Big Four).
Louisville & Nashville Railroad.
Nashville, Chattanooga & St. Louis Ry.
Chicago & West Michigan Railroad.
Detroit, Lansing & Northern Ry.
Mobile & Ohio Railway.
Peoria, Decatur & Evansville Railroad.
Toledo, Ann Arbor & North Michigan Ry.

And many other leading railroads not enumerated hereon.

The lists for this great work have been collected, arranged and compiled by the above roads and are brought down to date. In the judgment of the leading grain merchants and millers it is the best work of the kind ever published. Besides over 100 of the official railroad lists it contains the Grain Inspection Rules of the leading Boards of Trade, including Minneapolis, Philadelphia, Milwaukee, St. Louis, Detroit, Chicago, Cincinnati, Toledo, etc., etc., the list of officers of the leading Boards of Trade and other information of interest and profit to proprietors of elevators, flour mill owners, grain dealers and shippers, commission houses and track buyers, and concerns who desire to reach this class of customers.

The official lists of the grain dealers, shippers, flouring mills, elevators and commission houses of any one of the twenty-seven of the principal cities is ALONE WORTH MANY TIMES THIS SMALL OUTLAY, and this is the only work which contains these lists, and they are correct and revised to date, besides the thousands and thousands of places all over the country wherever grain is bought or sold.

Remember this great work will be sent immediately on receipt of price, express fully prepaid, provided they have not all been sold, in which case your remittance will be returned immediately.

SEND YOUR ORDER AT ONCE.

MITCHELL BROS. CO.,

184 AND 186 DEARBORN ST., CHICAGO, ILL.

JAMES STEWART & CO.,

ENGINEERS AND CONTRACTORS FOR

GRAIN ELEVATORS,

RAILROAD WORK AND HEAVY STRUCTURES,

ST. LOUIS AND BUFFALO.

CONSTRUCTION DEPARTMENT—WORK IN 1895.

GRAIN ELEVATORS:

500,000-bushel Elevator, with Marine Leg and Conveyor House 940 feet long, for the New Orleans & Western R. R. Co., Port Chalmette, La.
200,000-bushel Elevator for the Geo. P. Plant Milling Co., St. Louis, Mo.
500,000-bushel Storage Elevator for the Riverside Malting & Elevator Co., Riverside, Cincinnati, O.
150,000-bushel Elevator for the Indiana Distilling Co., Terre Haute, Ind.

RAILROAD BUILDINGS:

Two Freight Warehouses, each 115 x 625 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.
Eighty Cotton Warehouses, 62 x 98 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.
Cotton Compress Warehouse, 108 x 310 feet, for the New Orleans & Western R. R. Co., Port Chalmette, La.
Freight Station for the Baltimore & Ohio Southwestern R'y Co., Brighton, Cincinnati, Ohio.

RIVER AND HARBOR:

Dock and Warehouse, 225 x 1,500 feet for the New Orleans & Western R. R. Co., Port Chalmette, La.

MISCELLANEOUS:

85,000 Spindle Mill, for the Berkshire Cotton Mfg. Co., North Adams, Mass.
15,000 Spindle Mill, for the Home Cotton Mills Co., St. Louis, Mo.
Warehouse for the Bemis Bros. Bag Co., St. Louis, Mo.
10,000-bushel Distillery, the largest in the world, for the Indiana Distilling Co., Terre Haute, Ind.
Two Cotton Warehouses, each 200 x 250 feet, for the Pelzer Mfg. Co., Pelzer, S. C.
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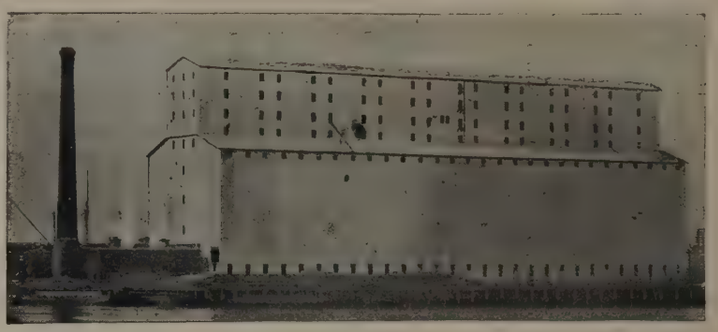

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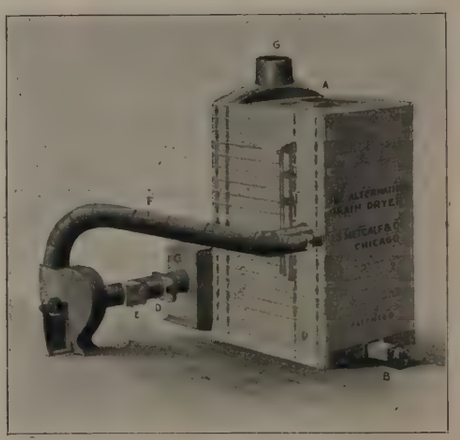

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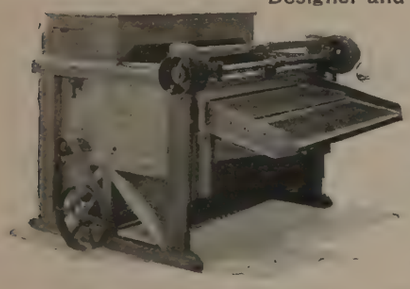

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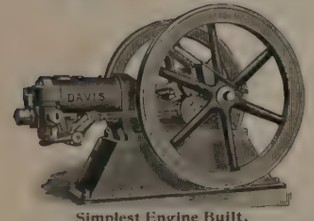

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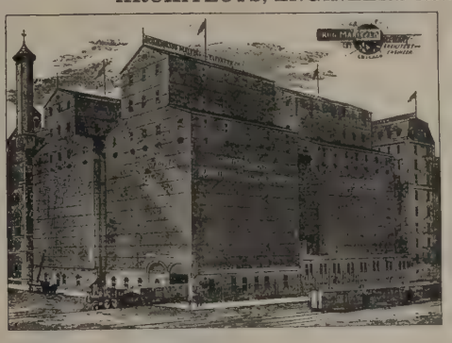

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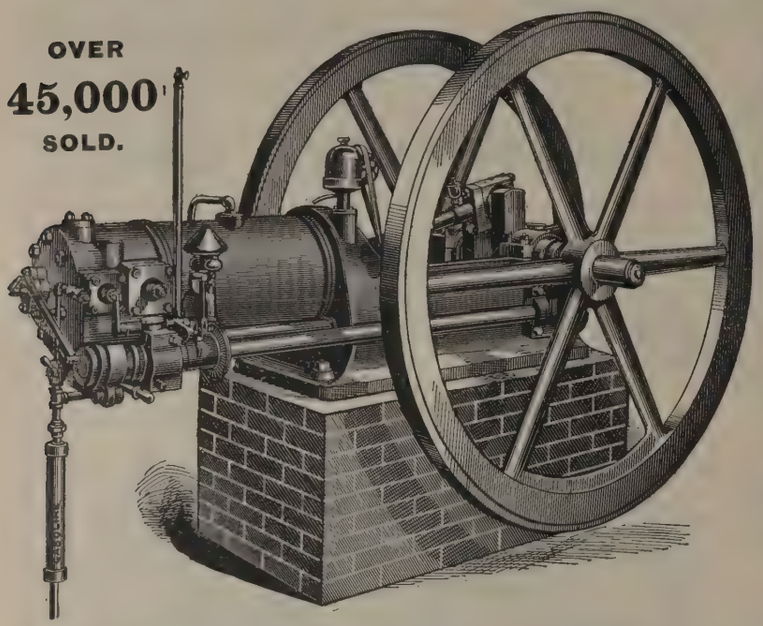

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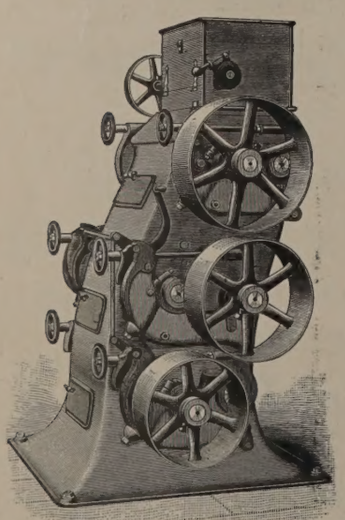

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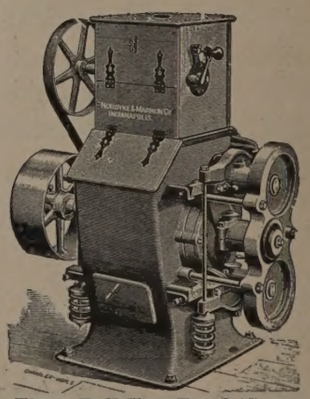

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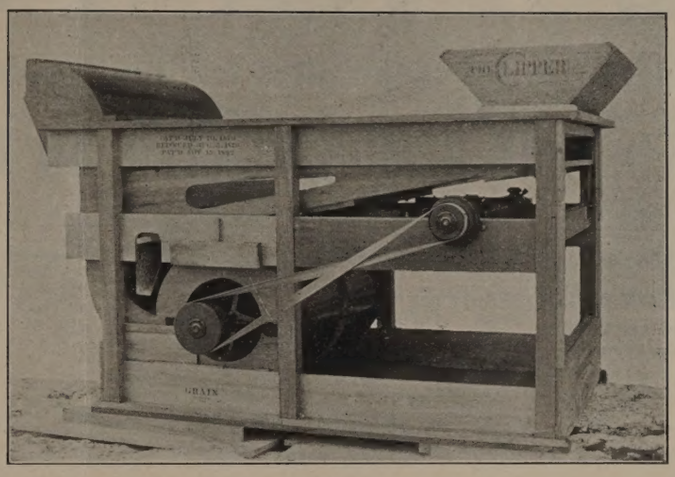

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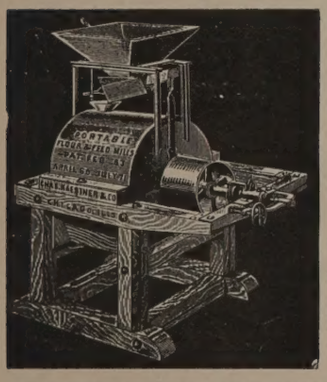

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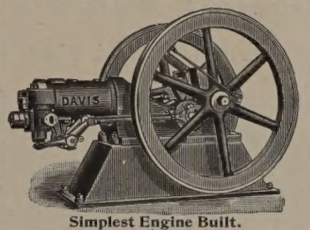

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